CONSTRUCTION NEWS

Engineering News-Record, September 6, 1923

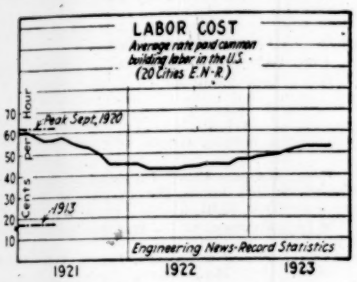
The Construction Barometer

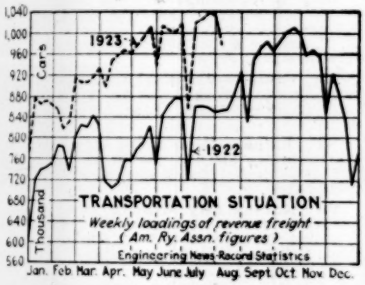
Drop in Volume of Construction—Heavy Car Loadings—Production Slow

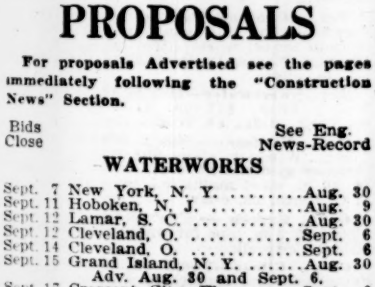
DESPITE the seasonal slowdown in production of basic materials, the sustained buying power of the public is evidenced in freight loadings of over a million cars per week since July 7. During the week of **Aug. 11**, however, there was a decrease of 59,968 cars, due to the observance of President Harding's funeral.

Construction cost has shown little change during the month, but volume has been steadily falling off since June.

Private construction work, for the week ended Aug. 30, exceeded public by 23 per cent, in actual money value. This is the first instance where private work, throughout the entire country, eclipsed public construction, since the week of July 19.




Thousand Cars
1923
1922
TRANSPORTATION SITUATION
Weekly loadings of revenue freight (Am. Ry. Assn. figures)
Engineering News-Record Statistics
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.


Millions Gross Tons
1923
1922
STEEL INGOT OUTPUT
(Am. Iron & Steel Inst. Figures)
Engineering News-Record Statistics
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Aug. 16	$13,110,000	$6,281,000	$19,391,000
Aug. 23	17,906,000	13,376,000	31,282,000
Aug. 30	12,669,000	15,178,000	27,847,000
3 Weeks	$43,685,000	$34,835,000	$78,520,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

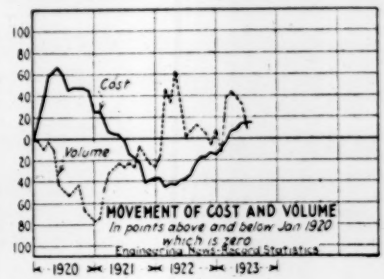
Week Ended	Public No.	Public Work	Private No.	Private Work
Aug. 16	4	$783,000	14	$4,860,000
Aug. 23	15	4,755,000	27	7,140,000
Aug. 30	8	1,496,000	25	12,342,000
3 Weeks	27	$7,034,000	66	$24,342,000

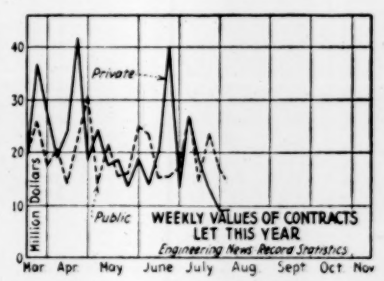
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

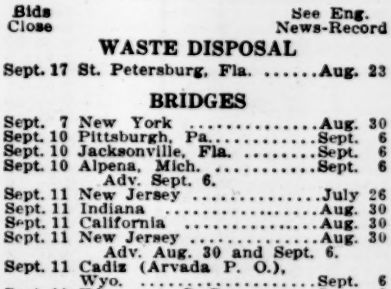
Week Ended	Private	Public All	Public Streets and Roads	Public Waterworks and Sewers	All Buildings
Aug. 16	29	160	66	29	37
Aug. 23	28	215	87	35	45
Aug. 30	28	189	66	33	51

FIR TIMBERS DOWN—OTHER BASE PRICES UNCHANGED

	Quoted on Sept. 6, at	Price Was	On
Structurals, Pittsburgh, 100 lb	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl	2.20	2.05	Feb. 1
Pine, N. Y., M. ft	63.00	59.00	July 5
Fir, San Fran., M. ft	38.00	41.00	Aug. 30
Common labor, hr	0.54	0.53	June 28






Million Tons
1923
1922
UNFILLED STEEL TONNAGE
On books of U.S. Steel Corporation
Engineering News-Record Statistics
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Sept. 7	New York, N. Y.	Aug. 30
Sept. 11	Hoboken, N. J.	Aug. 9
Sept. 12	Lamar, S. C.	Aug. 30
Sept. 12	Cleveland, O.	Sept. 6
Sept. 14	Cleveland, O.	Sept. 6
Sept. 15	Grand Island, N. Y. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 17	Crescent City, Fla.	Sept. 6
Sept. 17	Trenton, Mich.	Sept. 6
Sept. 18	McAlester, Okla. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 19	South Bend, Ind.	Aug. 30
Sept. 25	Ft. Worth, Tex. Adv. Sept. 6.	Sept. 6
Sept. 26	Providence, R. I. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 27	Bordentown, N. J. Adv. Sept. 6.	Sept. 6

SEWERS

Bids Close		See Eng. News-Record
Sept. 8	Lewistown, Pa.	Sept. 6
Sept. 10	New York	Aug. 30
Sept. 11	Laredo, Tex.	Aug. 30
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 11	Hartford, Conn.	Sept. 6
Sept. 12	Monessen, Pa.	Aug. 30
Sept. 13	Cleveland, O.	Sept. 6
Sept. 13	Baltimore, Md.	Sept. 6
Sept. 14	Wash., D. C. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 14	Millville, N. J. Adv. Sept. 6.	Sept. 6
Sept. 15	Norfolk, Va.	Aug. 30
Sept. 17	Plainfield, N. J. Adv. Sept. 6.	Sept. 6
Sept. 24	St. Petersburg, Fla.	Aug. 23
Sept. 24	Leesburg, Fla. Adv. Sept. 6.	Sept. 6
Sept. 26	Berwick, Pa. Adv. Sept. 6.	Sept. 6
Nov. 1	Fort Erie, Ont.	Aug. 23

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Sept. 17	St. Petersburg, Fla.	Aug. 23

BRIDGES

Bids Close		See Eng. News-Record
Sept. 7	New York	Aug. 30
Sept. 10	Pittsburgh, Pa.	Sept. 6
Sept. 10	Jacksonville, Fla.	Sept. 6
Sept. 10	Alpena, Mich. Adv. Sept. 6.	Sept. 6
Sept. 11	New Jersey	July 26
Sept. 11	Indiana	Aug. 30
Sept. 11	California	Aug. 30
Sept. 11	New Jersey Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 11	Cadiz (Arvada P. O.), Wyo.	Sept. 6
Sept. 11	Edgemont, S. D.	Sept. 6
Sept. 12	Ft. Wayne, Ind.	Aug. 23
Sept. 15	Canadian, Tex.	Aug. 23
Sept. 15	Pawkuska, Okla.	Sept. 6
Sept. 19	Phila., Pa.	Aug. 23
Sept. 20	Greenwood, Miss. Adv. Sept. 6.	Sept. 6
Sept. 24	New Jersey Adv. Sept. 6.	Sept. 6

Bids Close		See Eng. News-Record
Sept. 27	Chicago, Ill. Adv. Sept. 6.	Sept. 6
Sept. 28	Oil City, Pa. Adv. Sept. 6.	Sept. 6
Oct. 2	Mermentau, Mich. Adv. Aug. 30 and Sept. 6.	Aug. 30
Nov. 30	Sydney, Australia	Apr. 19
Adv. Apr. 19, May 3, July 5, Aug. 2 and Sept. 6.		

EXCAVATION, DRAINAGE IRRIGATION

Sept. 10	Corpus Christi, Tex.	Sept. 6
Sept. 11	Clarksdale, Miss.	Aug. 30
Sept. 14	Los Angeles, Calif.	Sept. 6
Sept. 15	Foley, Mo. Adv. Sept. 6.	Sept. 6
Sept. 18	Lake Charles, La.	Aug. 23

STREETS AND ROADS

Sept. 7	Trenton, N. J.	Aug. 30
Sept. 10	Dallas, Tex.	Aug. 23
Sept. 10	Madison, S. D.	Aug. 23
Sept. 10	St. Paul, Minn.	Aug. 23
Sept. 10	Greenwich, Conn.	Aug. 30
Sept. 10	Michigan	Aug. 30
Sept. 10	Sanford, Fla.	Aug. 30
Sept. 10	Seattle, Wash.	Aug. 30
Sept. 10	Groesbeck, Tex.	Aug. 30
Sept. 10	Wichita, Kan.	Aug 30
Sept. 10	Independence, Mo.	Sept. 6
Sept. 10	Greensburg, Pa.	Sept. 6
Sept. 10	Niagara Falls, N. Y.	Sept. 6
Sept. 10	Forest, Miss.	Sept. 6
Sept. 10	Long Island City, N. Y.	Sept. 6
Sept. 11	Pennsylvania	Aug. 30
Sept. 11	Anamosa, Ia.	Aug. 30
Sept. 11	Massachusetts	Aug. 30
Sept. 11	Alabama	Aug. 16
Sept. 11	St. Louis, Mo.	Aug. 23
Sept. 11	San Diego, Calif.	Aug. 23
Sept. 11	Alabama	Aug. 23
Sept. 11	Austin, Tex.	Aug. 23
Sept. 11	Sonora, Tex.	Aug. 23
Sept. 11	Washington	Aug. 30
Sept. 11	South Dakota	Sept. 6
Sept. 11	Cheyenne, Wyo.	Sept. 6
Sept. 11	Corinth, Miss.	Sept. 6
Sept. 11	Wilson, Okla.	Sept. 6
Sept. 11	Wapello, Ia.	Sept. 6
Sept. 11	Maryland Adv. Sept. 6.	Sept. 6
Sept. 11	Michigan	Sept. 6
Sept. 12	Faribault, Minn.	Aug. 23
Sept. 12	Michigan	Aug. 30
Sept. 12	Newton, Tex.	Aug. 30
Sept. 12	Lisbon, O.	Aug. 30
Sept. 12	Cleveland, O.	Sept. 6
Sept. 12	Marysville, Calif.	Sept. 6
Sept. 12	Cresson, Pa.	Sept. 6
Sept. 12	Cleveland, O.	Sept. 6
Sept. 12	Brooklyn, N. Y.	Sept. 6
Sept. 12	Davis, Okla.	Sept. 6
Sept. 12	Pittsboro, Miss.	Sept. 6
Sept. 13	Point Pleasant Beach, N. J. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 13	St. George, N. Y.	Sept. 6
Sept. 13	Walthall, Miss.	Sept. 6
Sept. 14	New York Adv. Sept. 6.	Sept. 6
Sept. 14	Gainesville, Fla.	Sept. 6
Sept. 14	Ohio	Sept. 6
Sept. 14	McComb, Miss.	Sept. 6
Sept. 14	Lisbon, O.	Sept. 6
Sept. 15	Niagara Falls, N. Y.	Aug. 30
Sept. 15	Tonawanda, N. Y. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 15	Conroe, Tex.	Sept. 6
Sept. 15	Honey Grove, Tex.	Sept. 6
Sept. 15	Bonham, Tex.	Sept. 6
Sept. 17	Virginia Adv. Sept. 6.	Sept. 6
Sept. 17	California	Sept. 6
Sept. 17	Kansas City, Kan.	Sept. 6
Sept. 17	Ivanhoe, Minn.	Sept. 6
Sept. 18	Marlin, Tex.	Aug. 30
Sept. 18	Clinton, Okla.	Sept. 6
Sept. 18	Louisiana	Sept. 6
Sept. 18	Waurika, Okla.	Sept. 6
Sept. 18	Alabama	Sept. 6
Sept. 19	Delaware Adv. Sept. 6.	Sept. 6
Sept. 19	Belvidere, N. J. Adv. Aug. 30 and Sept. 6.	Sept. 6
Sept. 19	Water Valley, Miss.	Sept. 6
Sept. 20	Newton, N. J. Adv. Sept. 6.	Sept. 6
Sept. 20	Alpine, Tex.	Sept. 6
Sept. 20	Tuscaloosa, Ala.	Sept. 6
Sept. 24	Carrollton, Miss.	Aug. 30
Sept. 24	Bronson, Kan.	Sept. 6
Sept. 24	Leesburg, Fla Adv. Sept. 6.	Sept. 6
Sept 24	Asbury Park, N. J. Adv. Sept. 6.	Sept. 6
Sept. 25	Independence, Kan.	Sept. 6
Sept. 25	St. Louis, Mo.	Sept. 6
Sept. 26	Kentucky	Aug. 23
Sept 26	Kentucky	Aug. 30
Sept. 26	Minnesota	Sept. 6
Sept. 27	Florida	Sept. 6
Oct. 1	Kelso, Wash.	Sept. 6
Oct 2	St. Louis, Mo.	Sept. 6

Bids Close		See Eng. News-Record
Sept. 10	St. Louis, Mo.	Sept. 6

BUILDINGS

Sept. 10	Louisville, Ky.	Aug. 30
Sept. 10	Detroit, Mich.	Aug. 30
Sept. 10	Phila., Pa.	Sept. 6
Sept. 11	Winona, Minn.	Aug. 30
Sept. 11	Fullerton, Calif.	Sept. 6
Sept. 11	Davenport, Ia.	Sept. 6
Sept. 12	Geneva, O.	Aug. 23
Sept. 12	Athens, O.	Aug. 30
Sept. 14	Los Angeles, Calif.	Aug. 30
Sept. 14	Clifton, N. J.	Sept. 6
Sept. 15	Dallas, Tex.	July 26
Sept. 15	Sedalia, Mo.	Aug. 16
Sept. 15	Proctor, Minn.	Aug. 23
Sept. 15	Johnstown, Pa.	Sept. 6
Sept. 17	Jackson, Miss.	Sept. 6
Sept. 20	Oakwood (Dayton P. O.), O.	Aug. 30
Sept. 21	Haywood, Wis.	Sept. 6
Sept. 21	Findlay, O.	Sept. 6
Sept. 23	Atlantic City, N. J.	Aug. 30
Sept. 28	Institute, W. Va.	July 26
Sept. 28	Pruntytown (Grafton P. O.), W. Va.	Aug. 2
Sept. 28	Montgomery, W. Va.	Aug. 9
Sept. 28	Institute, W. Va.	Aug. 9
Sept. 28	Huntington, W. Va.	Sept. 6
Oct. 1	Memphis, Tenn.	Sept. 6
Oct 8	Wichita, Kan.	Sept. 6
Oct. 10	Birmingham, Ala.	Aug. 30
Nov. 1	Ft. Worth, Tex.	July 12
Nov. 1	Dallas, Tex.	Aug. 2

FEDERAL GOVERNMENT WORK

Sept. 10	Flooring—Boston, Mass.	Aug. 23
Sept. 11	Dredging—Galveston, Tex. Adv. Aug. 16 to Sept. 6.	Aug. 16
Sept. 11	Road—Arizona	Aug. 30
Sept. 12	Dam — Klamath Falls, Ore.	Aug. 9
Sept. 12	Siphon—Mitchell, Neb.	Aug. 9
Sept. 12	Pistons, etc. — Denver, Colo.	Aug. 9
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19
Sept. 17	Quarters, etc. — Rutland, Mass. Adv. Aug. 23 to Sept. 6.	Aug. 23
Sept. 19	Laboratory—Wash., D. C.	Aug. 30
Sept. 24	Road Repair—Ft. Riley, Kan. Adv. Sept. 6.	Sept. 6
Sept. 25	Dredging—Galveston, Tex. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 25	Dredging — Providence, R. I. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 28	Breakwater — Milwaukee, Wis. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 28	Mailing Vestibule—Grand Junction, Colo. Adv. Sept. 6.	Sept. 6
Sept. 29	Outside Service Lines—Dawson Springs, Ky. Adv. Sept. 6.	Sept. 6
Oct. 3	Gates, Hoists, etc.—Denver, Colo. Adv. Sept. 6.	Sept. 6
Oct. 3	Superstructure — Dunkirk, N. Y. Adv. Sept. 6.	Sept. 6
Oct. 15	Breakwater—Hilo, H. T. Adv. Aug. 23 to Sept. 6.	Aug. 23
Nov. 1	Pipe Line Dredge—Chicago, Ill. Adv. Sept. 6.	Sept. 6

MISCELLANEOUS

Sept. 7	Lumber and Piles—New York, N. Y.	Aug. 30
Sept. 10	Enclosures—New York, N. Y.	Aug. 30
Sept. 10	Copper and Steel Standards, etc.—Santa Ana, Calif.	Sept. 6
Sept. 10	Culvert—Wilkinsburg, Pa.	Sept. 6
Sept. 10	Transmission Line — Nova Scotia	Sept. 6
Sept. 11	Grain Elevator—Oswego, N. Y. Adv. Aug. 16 to Sept. 6.	Aug. 16
Sept. 11	Fire Alarm System — New York	Sept. 6
Sept. 12	Tunnel—Colorado	Aug. 9
Sept. 14	Conduits—Erie, Pa.	Sept. 6
Sept. 17	Elimination of Grade Crossing —Youngstown, O.	Aug. 30
Sept. 17	Electric Light System—Washington, La.	Sept. 6
Sept. 17	Gas System — Fairfax, Okla.	Sept. 6
Sept. 19	Lock Gates, etc.—Illinois. Adv. Aug. 16 to Sept. 6.	Aug. 23
Sept. 25	Culvert—St. Louis, Mo.	Aug. 30
Sept. 28	Cement—Jefferson City, Mo.	Aug. 23
Oct. 6	Volt Insulators—Melbourne, Australia	Aug. 16
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., New Britain—Bd. Water Comm. plans main pipe extensions in eastern part of city. $100,000. J. D. Williams, city engr.

N. Y., Albany—Bd. Pub. Wks. takes bids about Sept. 10, enlarging city filtration plant, repairing coagulating basin and placing new sand in filter beds. $50,000. A. Hazen, 25 West 43rd St., New York, engr. Noted May 3.

N. Y., Jamestown—Plans 1 m.g. reservoir. $50,000. L. Bergman, city engr.

N. Y., Jamestown—Takes bids about Sept. 29, laying approximately 6,000 ft. mains in Roosevelt Sq., Harrison and Market Sts., also road from Steel St. to Hunt Rd. $60,000. L. Bergman, city engr.

Fla., Lakeworth—See "Industrial Works."

Wis., New London—C. J. Thompson, city clk., cancelled date of bids which were to be opened Sept. 1, 200,000 gal. reinforced reservoir. $15,000-$20,000. H. R. Albert, c/o Court House, Green Bay, engr. Noted Aug. 23.

Kan., Kansas City—Plans election to vote on $4,000,000 bonds for extension to water and electric light plant. H. Payne, clk.

Wyo., Evansville — Making preliminary plans new waterworks system. To exceed $15,000. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Mo., Breckenridge—Having preliminary plans and surveys made for complete new waterworks system. To exceed $15,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Mo., Canton—Voted $60,000 bonds for improving waterworks. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., Edina — Soon takes bids extending waterworks. $60,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Aug. 9.

Mo., Kansas City—Having revised plans prepared for new waterworks plant on Missouri River, $11,000,000. Fuller & Maitland, 201 Walsix Bldg., engrs.

Mo., Marceline—Sept. 14, to vote on $20,000 bonds for improving waterworks. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, consult. engrs.

Mo., Odessa—Sept. 11, to vote on $15,000 bonds extensions to mains.

Mo., Ridgeway—Sept. 17, to vote on $45,000 bonds for new waterworks system. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs. Noted Aug. 16.

Tex., College Station—Texas A. & M. College making plans well and waterworks improvements, $20,000; also graveling streets and sidewalks. Private plans.

Tex., Dallas — North Highlands Water Dist. plans mains, hydrants, etc. To exceed $15,000. Myers & Noyes, Dallas Co. Bank Bldg., engrs.

Tex., Frisco — Voted $40,000 bonds for waterworks system. Engineer not announced.

Tex., Highland Park (Dallas P. O.) — Plans 500,000 gal. concrete reservoir and miscellaneous work. To exceed $20,000. Myers & Noyes, Dallas County Bank Bldg., Dallas, engrs.

Tex., Sweetwater—Having plans prepared 1 m. g. filter. $35,000. J. B. Howley, Cotton Exch. Bldg., Ft. Worth, engr.

Ont., Windsor — Essex Border Utilities Comn., Windsor, plans filtration plant incl. strainer system, 7,000 ft. 42 in. and 3,000 ft. 36 in. steel mains, c.i. pipe, pumps, etc. J. C. Keith, ch. engr.

Calif., Eureka — City plans to purchase 12,500 ft. 2 in. pipe for water system. A. W. Kildale, city clk.

Calif., Gilroy—Voted $87,000 bonds for extensions and repairs to waterworks system. Noted July 26.

Calif., Lemore—Plan election to vote on $25,000 or more bonds for improvements to waterworks system.

Calif., Oroville—See "Miscellaneous."

Que., Montreal—Plans 12,300 ft. 12, 16, 20, 24 and 30 in. c.i. high pressure force main from McTavish reservoir to pumping station at Papineau St., also 3,673 ft. 8 in.

Waterworks (Continued)

c.i. mains in 7 other streets, $16,786. E. Gauthier, asst. city clk.

Ont., Fonthill — Plans pumping station and standpipe. $52,000.

Ont., Goderich—Plans to enlarge and extend waterworks intake $75,000. A. Gallow, mayor.

BIDS DESIRED

Fla., Crescent City — Sept. 17, by Bond Trustees, waterworks system, alternate proposals, 40,000 gal. reservoir, steel tank tower, pumping equipment, 3 motor pumps and 2 service pumps. $30,000. G. A. Main, Daytona, engr.

N. J., Bordentown—Sept. 27, by N. S. Hill, Jr., consult. engr., 112 East 19th St., New York City, at office of Commissioner of Educ., State House, Trenton, addition to water system at Bordentown Manual Training and Industrial School, here. J. Enright, secy. State Bd. Educ.; adv. E. N.-R. Sept. 6.

O., Cleveland—Sept. 12, by Cuyahoga Co. 12,000 ft. 6 and 8 in. c.i. mains in Impvt. 45. To exceed $25,000. R. F. MacDowell, Court House, engr.

O., Cleveland—Sept. 14, furnishing filtration valves. To exceed $50,000. G. W. Hawlin, City Hall, engr.

Mich., Trenton—Sept. 17, by L. Frebes, village clk., 2 m.g.d. water purification plant, pumping station, 1,500 ft. 14 in. and 5,600 ft. 10 in. pipe. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Minn., St. Paul—See "Miscellaneous."

Tex., Ft. Worth—Sept. 25, at office C. S. Snow, city secy., enlargement of filtration plant. D. L. Lewis, city engr.; adv. E. N.-R. Sept. 6.

Tex., Sweetwater—City Comn., receiving bids and opens same about Sept. 7, 2½ mi. water main from Lake Trammel. $20,000. W. H. Bartlett, Sweetwater, engr.

BIDS RECEIVED

N. Y., Brooklyn — N. J. Hays, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York City, Aug. 30, furnishing and setting fire hydrants and appurtenances on existing mains in Flatbush and Flatlands Sects., here, from Watega Contg. Co., $19,674. Noted Aug. 23.

Mich., Detroit—Detroit Water Bd. furnishing and installing 37,000,000 gal. capacity steam driven pump, from Worthington Pump & Mchy. Co., 115 Bway., New York City, $247,700.

CONTRACTS AWARDED

N. Y., Rochester — Monroe Co. and Manitou Beach Ry. Co., water supply system from Rigney's Bluff to Manitou Beach, to Rochester Willite Co., Rochester, $162,000.

Wis., Milwaukee — Central Bd. Purch., coal and ash handling equipment for Riverside pumping station, to Link Belt Co., 910 South Michigan Ave., Chicago, $44,800.

Minn., Hibbing—Bd. Educ. of Hibbing and town of Stuntz, extending mains between here and Stuntz, to serve towns Stuntz, Morton, Leetonia and Kelly Lake, within 5 mi. radius of Hibbing, to Phelps-Drake Co., 219 Power Bldg., $150,000.

Ark., Fort Smith—Water Works Dist. furnishing lead and yard, trenching, laying and backfilling about 64,000 ft. c. i. pipe, to Benson & Farrer, 120 South 2nd St., Guthrie, Okla. $39,239. Noted July 26.

Okla., Paden—See "Miscellaneous."

Calif., Santa Barbara—To United States Cast Iron Pipe & Foundry Co., Monadnock Bldg., Los Angeles, furnishing fittings, $2,749; De La Vaul centrifugal water pipe, $20,890.

Sewers

PROPOSED WORK

O., Dayton—Making surveys and plans sewage disposal plant. $1,000,000. Metcalf & Eddy, 14 Beacon St., Boston, Mass, engrs.

Wis., Reedsville—Plans sewerage system and disposal plant $25,000. C. Hagenon, city clk. Engineer not selected.

Mo., Canton — Voted $60,000 bonds for sanitary sewerage system. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, engrs.

Mo., Edina—Soon takes bids sanitary sewerage system. $60,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Note Aug. 9.

Mo., Macon — Making plans sanitary sewerage system. To exceed $25,000. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs.

Mo., Marceline—Sept. 14, to vote on $55,000 bonds for sanitary sewers and sewage disposal plant. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, consult engrs.

Mo., Poplar Bluff — Having preliminary plans prepared for storm and sanitary sewers in various streets in East Side Sewer Dist. $45,000. E. S. Nickey, City Hall, engr.

Mo., Ridgeway — Sept. 17, to vote on $45,000 bonds for sanitary sewers. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs.

Tex., Waco—Having plans prepared sewer extensions. To exceed $25,000. V. G. Koch, city engr.

Calif., Elsinore—Having plans prepared sewer outfalls and Imhoff tank. To exceed $25,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Calif., Long Beach—Soon takes bids deep sanitary sewers in Bway. between Golden and Alimitos Aves. $50,000. Noted Aug. 30.

Calif., Martinez—Mountain View Sanitary Dist., having plans prepared 10 mi. 6 in. vitr. lateral sewers. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Ont., London—Making plans storm and sanitary sewers, also pumping plant in South London. $300,000. W. P. Near, city engr.

BIDS DESIRED

Conn., Hartford—Sept. 11, by Bd. Contract & Supply, laying 800 ft. 48 in. concrete, rein.-con., vitr. clay, segmental block or tile, sewer in South Marshall St. R. N. Clark, city engr.

N. J., Plainfield—Sept. 17, by Common Council, constructing about 4,800 lin.ft. storm sewers, etc. A. W. Vars, city engr.; adv. E. N.-R. Sept. 6.

N. J., Millville—Sept. 14, by Bd. City Comrs., City Hall, reconstructing sewage disposal plant. W. F. Ware, dir. Parks and Pub. Impvts.

Pa., Berwick—Sept. 26, sewerage system, Alexander Potter, 50 Church St., New York City, consult. engr.; adv. E. N.-R. Sept. 6.

Pa., Lewistown—Sept. 8, by Lewistown Housing & Development Co., 880 ft. 8 in. terra cotta sewer, and 1,100 ft. 6 in. laterals in Juniata St., 273 ft. 8 in. terra cotta main, and 80 ft. 6 in. laterals in South Main St. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

D. C., Wash.—Sept. 14, by Dist. Comrs., 509 Dist. Bldg., 3,105 lin.ft. sewer. Further information, apply Room 427 Dist. Bldg.; adv. E. N.-R. Sept. 6.

Md., Baltimore—Sept. 13, by Bd. Awards, storm sewers in Dist. J-1 and other localities, Storm Water Contr. 59, incl. 6,000 lin. ft. 15-54 in. pipe. $50,000. B. L. Crozier, highways engr.

Fla., Leesburg—Sept. 24, by Bd. Comrs. and D. E. Bivens, city mgr., 2 mi. 8 in. pipe sewer extensions and 1 mi. 4 in. house connections. H. S. Jaudon Eng. Co., Elberton, Ga., engrs.; adv. E. N.-R. Sept. 6.

O., Cleveland — Sept. 13, by city, main sewer in southwesterly dist., also culverts in Morgan and Kingsbury Runs. To exceed $25,000 R. Hoffman, city engr.

O., Cuyahoga Heights (Cleveland P. O.) —Sept. 22, sewer in Sects. 1, 2 and 3, East 71st St. Dist. 1. To exceed $25,000. R. Hecker, Leader-News Bldg., Cleveland, engr.

BIDS RECEIVED

N. J., Newark—See "Streets and Roads."

Wis., Racine—Sewers in district south of Spring St. 1,840 ft. 48 in. rein.-con. and 7,630 ft. 8-12 in. vitr. pipe, from Brogan & Burns, 700 Dousman St., Green Bay, $31,584.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., altering and improving sewer in East 12th St., to P. J. Donlon Contg. Co.; Snyder Ave. and East 56th St., Brooklyn, $23,275; West St., to T. A. Reilly Co., 48 East 41st St., $19,071. Noted Aug. 16.

N. Y., St. George—Temporary sanitary sewers in North Burgher St. and Washington Ave., to J. Johnson Sons, West New Brighton, $3,424 and $4,323; Dixon Ave., to C. Vanderbilt, West New Brighton, $4,963; Clove Ave. to G. Orricco, 500 Britton Ave., Concord, $6,011. Noted Aug. 16.

N. Y., Troy — Laying 1,750 ft. 30 in. sewer in 10th St., 920 cu.yd. earth and 1,148 cu.yd. rock trenching, to H. W. Golden & Sons, 4 Elm Pl., $166,409.

Pa., Phila.—Substructure and superstructure of Southwest Sewage pumping plant, 40th Ward, to W. G. I. Contg. Co., Arch and Broad Sts., $174,132. Noted Aug. 23.

Fla., Miami—For 3,960 ft. terra cotta and 5,685 ft. concrete storm sewers, to J. J. Quinn Co., Miami, $110,000. Noted Aug. 9.

Tenn., Ripley — Complete sewerage system, to Sullivan, Long & Hagerty Constr. Co., Bessemer, Ala., $74,800. Engrs. est. $75,000. Noted May 10.

O., Cleveland—Cuyahoga Co. 16,000 ft. 8 in. and 16,000 ft. 12-60 in. tile sewers in Impvt. 30 of Co. Sewer Dist., to Langahan Constr. Co., Marshall Bldg., $219,000 Noted Aug. 30.

O., Columbus—See "Streets and Roads."

O., Maple Heights (Bedford P. O.)—For 8,617 ft. 15-20 in. vitr. clay sewers in Dunham Rd., Sect. 1, to B. J. Whittaker, 2269 Noble Rd., Cleveland, $58,862. Noted Aug. 16.

Mich., Detroit—Lateral 3940, to Rennie & Dibble, 9144 Linwood Ave., $8,960; Lateral 3982, to J. J. Reading, Detroit, $22,577; Lateral 3990, to Hammen & Co., 4612 Woodward Ave., $10,988; Lateral 3992, to S. Healey, Detroit, $10,500; Lateral 3864, to S. Fattore, 2201 St. Joseph Ave., $10,380; Laterals 3985, 3986 and 3989, to W. Blanck & Co., 827 Ford Bldg., $9,450, $3,801 and $30,446 respectively. Noted Aug. 9.

Ia., Oelwein—Sanitary sewerage system, to Seig Constr. Co., Waterloo, $28,974.

Kan., Russell—Sanitary sewers and disposal plant, to Amerman & Snyder, Wichita, $72,736. Engrs. est. $75,000. Noted June 21.

Mo., Kansas City—Sanitary sewers in Dists. 459 to W. C. Mullins Constr. Co., 419 Nelson Bldg., $27,813; Dist. 317 to Kinlin Constr. Co., 2538 Michigan Ave., $25,391.

Tex., Sanger—See "Waterworks."

Waste Disposal

PROPOSED WORK

N. Y., Elmira—Plans one 32 cell and one 22 cell garbage disposal plant, probably Becarri system. $100,000. G. W. Jarchow, clk.

Pa., Bradford — Plans new incinerator plant. $30,000.

BIDS RECEIVED

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 42 x 75 ft. brick incinerator, 36 ft. high with 150 ft. chimney, from Davis Garbage Furnace Co., 110 West 40th St., New York City, $69,890. Noted Aug. 2.

Calif., Sacramento—City Comrs., incinerator, from F. L. De Carle, Portland, Ore., $195,000. Noted Aug. 30.

Bridges

PROPOSED WORK

N. Y., Buffalo—Delaware, Lackawanna & Western R.R., 90 West St., New York, had plans prepared 310 ft. bridge, 32½ ft. wide, with concrete piers and abutments, to replace present Bridge 407 over Buffalo River, here. $200,000. A. E. Deal, Hoboken, N. J., bridge engr.

N. Y., Jamestown—Plans 2 span 110 ft. concrete and steel bridge, over Winsor St. $25,000-$30,000. L. A. Bergman, City Hall, engr.

Alabama—State Hy. Dept., Montgomery, plans 967 ft. creosoted timber bridge on Montgomery-Selma Rd., Lowndes Co., one 80 ft. steel span, 55 timber spans, creosoted piling and 2 concrete piers. $67,400. W. S. Keller, state highway engr.

Tenn., Springfield—Dept. Highways and Pub. Wks., Nashville, plans 160 ft. concrete bridge with 4 spans, over Sulphur Fork Creek, near here. $25,000.

Ky., Catlettsburg—Boyd Co. plans steel truss highway bridge, over east fork of Big Sandy River. $25,000. J. G. Rucker, co. judge.

O., Akron—See "Streets and Roads."

O., Cincinnati—Baltimore & Ohio R.R., Baltimore and Charles Sts., Baltimore, Md., making plans bridges over Colerain Ave. and Gest St., here. To exceed $50,000. H. A. Lane, Baltimore, ch. engr.

O., Cincinnati—Plans bridge at 8th St. $800,000. F. King, city engr.

Kan., Great Bend—Barton Co. plans two 30 ft. and one 45 ft. concrete deck girders on concrete piers and abutments, Federal Aid Project 160, Sect. B. H. S. Allen, co. engr.

Ark., Forrest City — See "Streets and Roads."

Bridges (Continued)

Texas—C. H. Kendall, engr., Sugarland, soon takes bids 350 ft. rein.-con. and steel truss bridge, over Beazos River, 3 spans, etc., for State, Federal and Ft. Bend Co. (Richmond). $225,000.

Tex., Houston—Harris Co. plans highway and railroad bridge across Ship Channel at Southern Pacific R.R. wharves. Howe & Wise, co. engrs.

Tex., Liberty—See "Streets and Roads."

Okla., Newkirk—Kay Co. plans election soon to vote on $600,000 bonds for steel and concrete bridges. Former bond election failed to carry. L. A. Cann, co. comr. Noted July 19.

BIDS DESIRED

New Jersey — Sept. 24, by State Hy. Comn., Trenton, constructing bridges in Rockaway and West Milford Twps., Passaic Co.; Jefferson and West Milford Twps., Morris and Passaic Counties, also towns of Hamilton and Bordentown, Mercer and Burlington Counties, J. L. Vogel, 772 Broad St., Newark, bridge engr.; adv. E. N.-R. Sept. 6.

Pa., Oil City — Sept. 28, by Comrs. Venango Co., at office in Franklin, removing highway bridges, over Allegheny River and tracks of Pennsylvania R.R., also constructing new bridge. F. P. McKibben, Schenectady, N. Y., engr.; adv. E. N.-R. Sept. 6.

Pa., Pittsburgh—Sept. 10, by Allegheny Co., removing piers and superstructure of Bridge 3, over Allegheny River, 7th St. J. P. Moore, co. controller.

Virginia—See "Streets and Roads."

Fla., Jacksonville — Sept. 10, by H. N. Rodenbaugh, genl. mgr. Florida East Coast Ry., St. Augustine, superstructure for 2,480 ft double track steel bridge on concrete piers, 5 truss spans and 23 girder spans, over St. Johns River, here. Total cost $1,800,000. Noted Aug. 9.

Louisiana—See "Streets and Roads."

Miss., Greenwood — Sept. 20, by Bd. Supervs. Leflore Co., bridge over Yazoo River. For further information address State Hy. Dept., Jackson; adv. E. N.-R. Sept. 6.

Mich., Alpena—Sept. 10, by G. R. Nicholson, city clk., steel bridge over Thunder Bay River, 9th St. Gram & Cissel, 225 Eng. Bldg., Ann Arbor, engrs.; adv. E. N.-R. Sept. 6.

Ill., Chicago—Sept. 27, by H. E. Wallace, clk, at office Sanitary Dist. of Chicago, 910 South Michigan Ave., superstructure double leaf Trunnion Rascule bridge (Strauss type) over Main Drainage Channel on line of South California Ave. W. O. Nance, chn.; adv. E. N.-R. Sept. 6.

Minnesota—See "Streets and Roads."

S. D., Edgemont—Sept. 11, by State Hy. Dept., Pierre, 336 ft. concrete deck girder over Cheyenne River on Federal Aid Project 159, Fall River Co., 1,020 cu.yd. concrete, 154,676 lb. reinforcing, 39,787 lb. structural steel, etc. Noted Aug. 23.

Wyo., Cadiz (Arvada P. O.)—Sept. 11, by State Hy. Comn., Cheyenne, steel truss bridge, one 161 ft. span, over Clear Creek, near here $27,000. J. F. Seiler, state bridge engr.

Okla., Pawhuska—Sept. 15, by Osage Co., 30 ft. girder bridge over Rush Creek; 30 ft. girder bridge over Buxham Creek; 30 ft. girder bridge over Belford Creek; 70 ft. steel span over Birch Creek; 120 ft. steel span over Salt Creek; 120 ft. steel span over Mud Creek; two 120 ft. steel spans over Hominy Creek. A. B. Ludwig, co. clk.

BIDS RECEIVED

Ohio—See "Streets and Roads."

Mich., Saline—State Hy. Dept., Lansing, 75 ft. concrete girder Bridge 8111001, near here, Washtenaw Co., from J. S. Whitcomb Constr. Co., 525 Woodland Ave., Detroit, $39,542.

CONTRACTS AWARDED

Fla., Jacksonville — H. N. Rodenbaugh, genl. mgr. Florida East Coast Ry., St. Augustine, sub-structure for 2,480 ft. double track steel bridge on concrete piers, 5 truss spans and 23 girder spans, over St. Johns River, here, to Union Bridge Constr. Co., 903 Sharp Bldg., Kansas City, Mo. Total cost $1,800,000. Noted Aug. 9.

Alabama—State Hy. Comn., Montgomery, concrete girder bridge over Flint River, Madison Co., to Smith Co., 30 3rd Ave. W., Birmingham, $24,679. Noted Aug. 16.

Alabama—State Hy. Dept., Montgomery, 654 ft. concrete bridges on Duplin-Orion Rd. on Bee Line Highway, 34 ft. spans, Montgomery Co., to W. C. McCoy, Lafayette, $40,252. Noted Aug. 9.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, constructing bridges, **c s means concrete slab, c g concrete girder, s steel, c concrete, c c concrete culvert, super superstructure and sub substructure,** to W. H. Shons, South Liberty Ave., Freeport, **1-38B Johnson means (Route 1, Sect. 38B, Johnson Co.),** 1 sub for steel and one 50 ft. c g 1-38B, Johnson, $19,405 1 super for 85 ft. steel 1-38C Johnson, $6,670 1 sub for steel and one 50 ft. c g 1-39B Massac, $16,179 1 super for 140 ft. steel 1-39C Massac, $13,162 and one 30 ft. c g 1-40B Massac, $5,017 one 100 ft. steel complete and one 10 ft. culvert, 3-74B Randolph, $32,500, one 12 ft. c c, one 28 ft. c s, one 30 ft. c g and 2 sub for two 120 ft. steel, 34-1B Saline, $33,267, two 20 ft. c s, one 30 ft. and two 40 ft. c g 34-2B Saline, $24,833, one 10 ft. c c, two 12 ft. c c, two 24 ft. c s, two 40 ft. c g, and one 35 ft. c g 34-3B Pope-Hardin, $55,204, one 200 ft. super for steel 34-5C Hardin, $24,892; to F. E. Marsh & Co., Jefferson, Ia., 1 sub for steel 2-63B McLean, $20,296; to Continental Bridge Co., Monadnock Bldg., Chicago, super for two 80 ft. steel spans and one 120 ft. s, 2-63C McLean, $20,570, super for 80 ft. s Route 7, Federal Aid Project 7, Sect. R-3 Bureau, $5,667, to W. C. Johnson, 512 South High St., Belleville, sub for one 200 ft. steel span 3-59B Madison, $21,786; to General Constr. Co., Syndicate Trust Bldg., St. Louis, Mo., super for one 200 ft. steel span 3-59C Madison, $22,532, super for two 120 ft. steel spans 34-1C Saline, $17,789; to F. O. Panton, South Elgin, three 22 ft. c s 6-F Cook, $8,795; to Sheldon Constr. Co., Putnam Bldg., Davenport, Ia., sub for one 80 ft. steel, and one 30 ft. c s Route 7, Federal Aid Project 7, Sect. R2 Bureau Co., $21,548; to St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., super for 150 ft. steel and concrete 33-4C Jasper, $13,014; T. Walbridge Eng. Co., 1014 South Michigan Ave., Chicago, one 14 ft. c c, one 30 ft. and one 35 ft. c g 34-4B Hardin, $12,251; two 12 ft. c c, one 30 ft. c g and sub for one 200 ft. steel, 34-5B Hardin, $40,639. Noted Aug. 16.

Calif., San Francisco — City and San Francisco Co., steel bridge superstructure to carry Bay Crossing Pipe Line of Hetch Hetchy Project across Dumbarton Straits. Contr. 93, thirty-six 105 ft. spans, etc., to United States Steel Products Co., Rialto Bldg., $272,162. Noted Aug. 30.

Dams

PROPOSED WORK

Pa., Sharon—See "Miscellaneous."

Tex., Ballinger — Coke-Runnels Water Impvt. Dist. 1, plans 2,000 ft. dam, 100 ft. high to provide irrigation for 200,000 acres. $4,500,000 bonds voted for project. C. C. Holder, Bronte, acting consult. engr. Noted July 26.

Tex., Ft. Worth—Southwestern Portland Cement Co., Two Republics Bldg., El Paso, had plans prepared 600,000 gal. per day earth dam, 40 ft. high, 150 ft. concrete spillway. $60,000. J. B. Hawley, Cotton Exch. Bldg., engr. Noted May 31.

CONTRACTS AWARDED

Ky., Danville—Kentucky Hydro Electric Co., c/o Middle West Utilities Co., 122 South Michigan Ave., 260 ft. dam, 2 mi. south from mouth of Dix River, to L. E. Meyer, Monadnock Bldg., Chicago. Est. cost $4,000,000. Noted July 12, under Miscellaneous.

Railways

PROPOSED WORK

Texas—Ft. Worth Belt Line R.R., Ft. Worth, plans belt line railroad around city to avoid grade crossings, switching, etc. K. Roby, Courthouse, Ft. Worth, engr.

Texas — Trinity Portland Cement Co., Commonwealth Bldg., Dallas, 1½ mi. standard gauge siding on White Settlement Rd., in Ft. Worth, to D. H. Purvis, 9th and Houston Sts., Ft. Worth, $40,000.

Ontario—Niagara & St. Catharines Electric Ry., Niagara Falls, having plans prepared extending lines, to Lundys Lane, building new terminal and double tracking on Victoria Ave., Niagara Falls. $70,000. A. Scott, c/o owner, engr.

CONTRACTS AWARDED

Arkansas — A. S. Johnson Lumber Co., Reader, will grade and lay 22 mi. single track railroad from Reader to Arkansas oil fields, using 56 lb. rails, connecting with Missouri Pacific R.R., by day labor. $125,000.

Excavation, Drainage Irrigation

PROPOSED WORK

Va., Richmond—City plans to expend $3,000,000 in harnessing Shockoe Creek to prevent damage by freshets following heavy rains. A. J. Saville, dir. Pub. Wks.

Mich., Detroit—Wayne Co., County Bldg., having plans prepared for 17,063 ft. Sects. 1-5, Capler Drain, in Redford and Greenfield Twps. G. A. Dingman, County Bldg., engr.

Tex., Childress—Upper Red River Valley Dist., plans to irrigate 18,000 acres. R. G. Garraway & Co., Childress, engrs.

Calif., Macdoel—Butte Valley Irrigation Dist voted $594,000 bonds for irrigation system. C. T. Darley, Klamath Falls, Ore., engr. Noted Sept. 7.

BIDS DESIRED

Wis., Green Bay—See "Buildings."

Mo., Foley—Sept. 15, at Bank of Foley, pumping station for Sandy Creek D. D. H. Heinman, pres. Bd. Supervs. Sandy Creek D. D.; adv. E. N.-R. Sept. 6.

Tex., Corpus Christi—Sept. 10, by City and Nueces Co. Navigation Dist. 1, c/o R. Driscoll, chn., Corpus Christi, constructing rip rap breakwater in Bay, rip rap bulkhead with wharf piling in north part of city, 3,000,000 cu.yd. excav. R. J. Cummins, Gulf Bldg., Houston, engr.

Calif., Los Angeles—Sept. 14, by Harbor Comn., 312 Byrne Bldg., 700,000 cu.yd. dredging in Los Angeles Harbor.

CONTRACTS AWARDED

Miss., Yazoo — Rocky Bayou Levee & Drainage Dist., to Clark-Hunt Constr. Co., Memphis, Tenn., 300,000 cu.yd. levee $0.189, 513,000 cu.yd. drainage channels and 51 acres clearing and grubbing for levee, drag line work $0.14.

O., Cleveland — Cleveland Union Terminals Co., 323 Lakeside Ave., excavation for new passenger and freight terminal building, 1,000,000 cu.yd. excav., to Walsh Constr. Co., 318 Euclid Ave.

Ill., Freeport—W. T. Rawleigh Co., 101 South Liberty Ave., excavation for 150 x 300 ft. power house, to Gund-Graham Co., Freeport. Total cost $250,000.

Wis., La Crosse—City will dredge approximately 203,130 cu.yd. by day labor. Former bids rejected. W. J. Fries, chn. Noted Aug. 23.

Wis., New London—C. J. Thompson, city clk., will build rein.-con. reservoir, 200,000 gal. capacity, by day labor. Former bids rejected. Noted Aug. 23.

Minn., Worthington—Nobles Co., Judicial Ditch 1, 21,900 lin.ft. open ditch, 139,365 cu.yd. excav., waste bank leveling, to E. D. Barr, Bird Island; 36,400 lin.ft. 6-28 in. tile, 3 flood water inlets, to Ceylon Cement Tile Co., Ceylon; tile labor to Berg & Morris, Worthington. Total $44,000. Noted July 26.

Tex., Sanger—Will construct waterworks and sewerage systems, by day labor. $55,000 and $22,500 respectively. E. L. Dalton, 1915½ Main St., Dallas, engr. Noted July 26.

Tex., Wichita Falls—Wichita Co. Irrigation Dist. 1, 30 mi. North Side Canal and distributing system 100 mi. ditch, to Callahan Constr. Co., Kirby Bldg., Dallas. Noted June 14.

Streets and Roads

PROPOSED WORK

Pennsylvania—State Hy. Dept., Harrisburg rejected bids for road work on Application 2452 Monroe Co., Route 77 Butler Co., Route 247 Fayette Co., Route 167 Monroe Co. and Route 108 Washington Co. Noted July 26 and Aug. 16.

W. Va., Morgantown—Oct. 15, to vote on $250,000 bonds for street improvements. C. McDowell, city engr.

N. C., Charlotte—Mecklenburg Co. plans hard surfacing 10 mi. Mt. Holly Rd., 18 ft. $250,000. L. Ross, Charlotte, engr.

Fla., Clearwater—Pinellas Co. plans election to vote on $109,000 bonds paving with brick on asphalt 5.4 mi. roads in Special Road and Bridge Dist. 2 (Pinellas Park), 16 ft. J. A. Mortland, Tampa, engr.

Fla., Winter Park—Election Sept. 18, to vote on $100,000 bonds paving various streets.

Alabama—State Hy. Dept., Montgomery, plans grading and gravel surfacing 20.232 mi. Montgomery-Selma Rd., Federal Aid Project 139, Lowndes Co. $237,800. W. S. Keller, state highway engr.

Streets and Roads (Continued)

Miss., Brookhaven—Plans hard surfacing 2 blocks Monticello St., 2 blocks Cherokee St., 3 blocks East and West Whiteworth St. T. M. Snuglie, mayor.

La., Independence—Plans street improvements. $27,000 bonds sold for project.

Tennessee — Dept. Highways and Pub. Wks., Nashville, soon takes bids paving 12 mi. road from Lawrence Co. line to Waynesboro, 16 ft., Wayne Co., gravel and chert. $150,000. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, soon takes bids grading and surfacing probably with bituminous macadam 4 mi. road from New Markel to Knox Co. line, Jefferson Co., $25,000; 12 mi from Knoxville to Jefferson Co. line, Knox Co., both 16 ft. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, soon takes bids bituminous macadam paving 13 mi. road, 16 ft., from Knox Co. line to Straw Plains, Knox Co., State Aid Project 132; 5 mi. from Hamilton Co. line to Luck Creek, Marion Co., Federal Aid Project 2B and 24. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, had surveys made constructing 5 mi. Federal Aid Highway, from Haywood Co. line to Fayette Co. line, 18 ft., Tipton Co. J. G. Creveling, comr.

Tennessee — Dept. Highways and Pub. Wks., Nashville, having surveys made constructing 10 mi. highway, between Linden and Lewis Co. lines, 16 ft., Perry Co. J. G. Creveling, comr.

O., Akron—Summit Co. plans vitr. brick paving, Barberton-Greenwich Rd., $41,000; Robinson Ave., in Barberton, $35,500; Springfield Sanitorium Rd. from Canton Rd. to Krumroy-Mayersville Rd.; Barberton-Springfield Rd., Sect. C, $42,000; resurfacing Springfield Rd., waterbound macadam, $35,000-$45,000. J. Weaver, County Bldg., co. engr.

O., Akron—Summit Co. and State plan improving 11 mi. Cleveland-Massillon-Columbus Rd., 20 ft., incl. bridges and culverts. $500,000. State's share of cost $90,000. J. Weaver, co. engr. Noted June 21.

O., Lima—Plans paving 13,500 ft. Main St., 24 ft., vitr. bric. $100,000-$125,000.

O., Newark—Licking Co. plans paving 4 mi. road from Hanover to Coshocton Co. line, 20 ft., vitr. brick. $85,000.

Michigan—State Hy. Dept., Lansing rejected bids grading and surfacing 5.973 mi. State Trunk Line Rd. 11-25, Sect. A and B, Oceana Co., 0.723 mi. State Trunk Line Rd. 14-15, Sect. A, Mason Co., and 4.896 mi. State Trunk Line Rd. 10-30, Iosco Co. Noted Aug. 9 and 16.

Michigan—State Hy. Dept., Lansing, soon takes bids grading and surfacing 4½ mi. State Trunk Line Rd. 68-3, Ontonagon Co. stamp sand. F. F. Rogers, state comr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids grading following sections **1-39A Massac means (Route 1, Sect. 39A, Massac Co.)**, 1-39A and 1-40 A Massac, 2-63A, Woodford-McLean, 34-1A and 34-2A Saline, 34-3A Pope-Hardin, 34-4A and 34-5A Hardin, 7-55-11 **Bureau means (Route 7, Federal Aid Project 55, Sect. R1 Bureau Co.)**, 7-55-R1 and 7-55-14A Bureau, Routes 7 and 29, Federal Aid Project 7, Sect. R, Bureau Co. Noted Aug. 9.

Wis., Genoa Junction — Making plans paving with 1 course plain concrete 11,000 sq.yd. Freeman and Walworth Sts. To exceed $25,000. H. J. Peters, Courthouse, Elkhorn, engr.

Wis., Racine—Making plans paving with vitrified brick, asphalt or concrete several miles 24 streets. To exceed $25,000. J. W. Beaugrand, City Hall, engr.

Ia., Marshalltown — Marshall Co. voted $300,000 bonds to pave 20 mi. Lincoln Highway and various roads. D. C. Elder, co. engr. Noted July 19.

Kan., Caldwell—City Clerk opens bids about Sept. 6, 12,300 sq.yd. brick, concrete or asphalt concrete paving, 7070 lin.ft. curbing and gutter, 555 lin.ft. headers, 4,700 cu.yd. excav., etc. $40,000. J. E. Berlin, 318 Sedgwick Bldg., engr.

Kans., Leavenworth—Making plans grading, paving and curbing Central Ave., Pottawatomie, Fifth, Ninth, Oak, Arch, Spruce, Kickapoo, Dakota and Maple Sts., also alleys in city blocks 3, 20, 24, 42, 55, 76 and 93; grading and opening Dakota St. from 10th to 14th, Maple Ave. from Thornton to Limit Ave.

Kan., Marion—Marion Co. plans surfacing with concrete or bituminous filled brick, 0.78 mi. New Santa Fe Trail northeast of Florence, known as Kansas Federal Aid Project 162, R. K. Walters, Marion, co. engr.

Kan., Wichita — Sedgwick Co. making plans brick or concrete paving 1.989 mi. Valley Center Extension, 18 ft. M. Roseberry, Court House, engr.

South Dakota—State Hy. Dept., Pierre, plans to gravel surface 12.5 mi. Federal Aid Project 153, Union Co. $62,150. F. D. Hudgins, ch. engr.

Mo., Ilmo—Having preliminary plans prepared paving 13 blocks in 3rd, 4th, Pine and Maple Aves., concrete and gravel $27,000.

Ark., Forrest City—St. Francis Co., making preliminary plans grading and paving several roads, also constructing several creosoted timber bridges in Dist. 5, St. Francis Co. $150,000. F. Reese, Neuhart, engr.

Ark., Forrest City — Francis Co. soon takes bids constructing about 5 mi. gravel roads and installing pile bridges in Dist. 12. $75,000. A. Buford, Forrest City, engr.

Ark., Pine Bluff—City plans paving with fibre or vitrified brick, 4½ mi. cemetery roads. $55,000. E. B. Reynolds, Pine Bluff, engr.

Tex., Amarillo—Potter Co. having plans prepared grading and gravel surfacing 6.16 mi. State Highway 13, 16 ft., $61,500; 6 mi. State Highway 33, 16 ft., $75,000. O. A. Seward, co. engr.

Tex., Angleton — Brazeria Co. making plans shell surfacing 6.6 mi. Rd. Dist. 16, 18 ft. $80,000. W. H. Munson, Angleton, engr.

SEWAGE TREATMENT WORKS—CHICAGO, ILL.

Following are lowest three bids opened July 26, by Sanitary Dist., for constructing North Side Sewage Treatment Works, Div. A, (A) J. Griffiths & Son Co., 112 West Adams St., (awarded contract); (B) White Constr. Co.; (C) W. J. Newman Co., 21 North Curtis St. The unit bids were as follows:

	A	B	C
65,000 cu.yd. removal of top soil	$1 85	$1 00	$1 40
330,000 cu.yd. earth excavation—Class A	1 80	2 50	1 77
40,000 cu.yd. earth excavation—Class B	3 00	5 00	5 665
5 cu.yd. rock excavation	5 00	5 00	5 00
500 cu.yd. rolled embankment	3 00	2 50	2 00
65,000 cu.yd. replacing top soil	1 40	1 35	1 975
100 M. ft. B.M. sheeting	40 00	40 00	40 00
10,000 cu.yd. sand or gravel fill	4 00	4 50	2 50
7,500 cu.yd. cinder fill	3 00	4 00	1 75
7,500 cu.yd. concrete—Class A	14 50	14 50	9 73
50,000 cu.yd. concrete—Class B	18 00	15 00	11 60
40,000 cu.yd. concrete—Class C	21 00	22 00	26 87
9,000 cu.yd. concrete—Class D	25 00	23 50	21 24
1,500 cu.yd. concrete—Class E	15 00	14 00	10 00
175,000 sq.ft. concrete baffles	0 50	0 65	0 09
5,000 bbl. additional portland cement	3 50	3 40	3 75
15,000 lin.ft. steel plate expansion joints	2 00	3 00	2 25
10,000 lin.ft. copper plate expansion joints	1 00	2 50	1 30
33,000 sq.yd. asphalt expansion joints	1 50	0 65	0 75
500 cu.yd. brick masonry	50 00	50 00	15 26
12,500,000 lb. reinf. reing steel	0 05	0 06	0 064
350,000 lb. reinforcing mesh	0 08	0 12	0 085
1,500,000 lb. structural steel	0 085	0 09	0 11
850,000 lb. miscellaneous steel and wrought iron	0 12	0 14	0 115
300,000 lb. iron castings	0 08	0 13	0 08
7,000 lb. miscellaneous bronze, brass and copper	0 90	1 80	0 60
16,000 sq.ft. subway grating	1 50	1 50	1 55
3,200 lin.ft. pipe railing	2 50	4 00	2 50
300,000 lb. galvanizing	0 05	0 05	0 025
4,000 lin.ft. 6-in. vitrified sewer pipe	0 80	0 70	0 35
1,500 lin.ft. 8-in. vitrified sewer pipe	1 00	1 00	0 45
1,000 lin.ft. 12-in. vitrified sewer pipe	2 00	1 50	0 80
1,000 lin.ft. 15-in. vitrified sewer pipe	3 00	2 50	1 26
1,000 lin.ft. 18-in. vitrified sewer pipe	3 50	3 50	1 75
1,500 lin.ft. 24-in. vitrified sewer pipe	6 00	6 00	3 00
3,000 lin.ft. 4-in. tile underdrain	0 40	0 60	0 15
1,000 lin.ft. 6-in. tile underdrain	0 45	1 00	0 19
100 M. ft. B.M. miscellaneous woodwork	200 00	175 00	156 00
7,100 aeration plate containers—9 or 10 plate	15 00	15 00	27 55
825 aeration plate containers—8 plate or less	13 00	12 00	13 82
35,000 lin.ft. whole separator blocks	1 50	3 50	9 06
62,000 lin.ft. split separator blocks	1 00	1 75	1 65
4,500,000 lb. cast-iron pipe, bell and spigot	0 09	0 07	0 175
100,000 lb. cast-iron pipe, flanged	0 12	0 09	0 089
600,000 lb. cast iron specials, bell and spigot	0 16	0 13	0 133
525,000 lb. cast iron specials, flanged	0 15	0 12	0 115
700 taps, drilling and tapping cast iron pipe	8 00	5 25	4 80
4,300 lin.ft. 8-in. water main	6 50	2 50	3 75
Special work on 8-in. water main (lump sum)	6,000 00	4,200 00	4,475 00
28,000 lin.ft. wrought iron pipe, 1-in. and less	0 40	0 35	0 36
8,000 lin.ft. wrought iron pipe, 1¼ and 1½-in	0 70	0 50	0 47
6,000 lin.ft. wrought iron pipe, 2-in	1 10	0 70	0 70
15,000 lin.ft. wrought iron pipe, 2½ and 3-in	1 90	1 20	1 17
6,000 lin.ft. wrought iron pipe, 4-in	2 75	1 80	1 70
3,500 lin.ft. wrought iron pipe, 5 and 6-in	3 80	3 00	3 09
12,500 wrought iron pipe fittings, 1-in. and less	0 18	0 43	0 43
4,000 wrought iron pipe fittings, 1¼ and 1½-in	0 45	0 70	0 68
1,800 wrought iron pipe fittings, 2-in	0 75	0 90	0 96
12,000 wrought iron pipe fittings, 2½ and 3-in	1 50	2 00	1 96
1,700 wrought iron pipe fittings, 4-in	3 50	3 80	3 58
500 wrought iron pipe fittings, 5 and 6-in	7 25	9 00	8 58
825 gate, globe, angle, hose, and check valves, 1-in. and less	1 90	2 30	2 20
80 gate, globe, angle, and check valves, 1¼ and 1½-in	3 40	3 70	3 50
25 hose valves, 1½-in	3 60	3 40	3 50
200 gate, globe, angle, and check valves, 2-in	5 60	5 50	5 80
100 gate, globe, angle, and check valves, 2½ and 3-in	14 00	11 50	11 22
900 gate, globe, angle, and check valves, 4-in	21 00	23 00	22 40
25 gate, globe, angle, and check valves, 5 and 6-in	49 00	33 00	32 00
1 gate valve, 8-in	65 00	56 00	54 40
2 gate valves, 12-in	130 00	120 00	125 00
60 gate valves, 14-in	186 00	162 00	157 00
72 gate valves, 16-in	189 00	217 00	208 00
36 angle valves, 16-in	633 00	500 00	483 00
36 check valves, 16-in	215 00	360 00	341 00
1 gate valve, 36-in	1,040 00	1,200 00	1,173 00
7 gate valves, 48-in., including operating mechanism	2,300 00	2,000 00	1,934 00
75 floor stands for valves under 48-in	31 00	60 00	59 00
40 condensate traps	55 00	66 00	67 00
750,000 lb. installing meters, sluice gates, and appurtenances	0 10	0 04	0 02
30 installing settling tank thickener mechanisms	550 00	1,250 00	600 00
10 hydrants	150 00	100 00	125 00
17,000 lin.ft. steel rail—30 lb	0 35	0 80	1 56
1,600 lin.ft. standard gage track—70 lb	3 75	7 00	5 28
Gantry crane and transfer trucks (lump sum)	3,800 00	8,000 00	8,400 00
17,000 sq.yd. macadam roadways	3 75	3 25	2 30
50,000 gal. water	0 07	10 00	
72,000 setting aeration plates	0 20	0 07	0 12
Cleaning up (lump sum)	20,000 00	20,000 00	6,000 00
Extended totals	$5,602,636	$5,886,649	$6,230,564

Streets and Roads (Continued)

Tex., Brownsville — Cameron Co. soon takes bids paving 20.8 mi. highway, 18 ft., asphalt on concrete. $400,000. W. O. Washington, Brownsville, engr.

Tex., Cameron—Milam Co. election Sept. 25, to vote on $100,000 bonds improving Highway 36. A. F. Mitchell, co. engr.

Tex., Cameron—Milam Co. making plans grading, etc., 11.4 mi. State Highway 43A, 24 ft. $50,000. A. F. Mitchell, co. engr.

Tex., Canton—Van Zandt Co. soon takes bids graveling 8.78 mi. Federal Aid Project 363. $65,000. F. W. Gaines, co. engr.

Tex., Carrizo Springs—Dimmit Co. voted $234,000 bonds grading and graveling 56 mi. State Highway 12B. Total cost $470,000. W. H. Davis, co. judge. Engineer not selected. Noted July 26.

Tex., College Station—See "Waterworks."

Tex., Conroe — Montgomery Co. making plans paving various roads. $190,000. W. J. Kelley, Conroe, engr.

Tex., Corsicana — Making plans paving various streets. $400,000. W. W. McClendon, Corsicana, engr.

Tex., Corsicanna—Navarra Co. election soon to vote on $4,750,000 bonds hardsurfacing various roads. McClendon & Purnell, Corsicanna, engrs. Noted Aug. 16.

Tex., Corsicana—Navarro Co. had plans prepared paving 6.48 mi. Corsicana-Waco Highway. $92,000. W. W. McClendon, Corsicana, engr.

Tex., Dallas—Plans paving North Fitzhugh St., probably bituminous. To exceed $25,000. E. A. Kingsley, city engr.

Tex., Georgetown—Williamson Co. making plans constructing 7.5 mi. State Highway 36B. $82,000. R. A. Nichols, co. engr.

Tex., Houston — Had plans prepared asphalt paving Waugh Dr., 30 and 40 ft. $50,000. J. C. McVea, city engr.

Tex., Huntsville — Voted $50,000 bonds paving various streets. H. L. Leigh, Huntsville, city clk.

Tex., Jasper — Jasper Co. making plans graveling 7.9 mi. State Highway 7, 18 ft. $50,000. C. P. Hunter, co. engr.

Tex., Jasper—Jasper Co. voted $125,000 bonds for highway improvements. C. P. Hunter, co. engr.

Tex., Laredo—Webb Co. voted $200,000 bonds paving highway. L. Villegas, Laredo, mayor. Noted Aug. 16.

Tex., Liberty—Liberty Co. had plans prepared grading and bridging 34.54 mi. Federal Aid Project 352, 18 ft. $460,000. W. C. Young, Liberty, engr.

Tex., Linden—Plans election to vote on $100,000 bonds for road work. S. L. Henderson, Linden, judge.

Tex., Madisonville—Madison Co. election Sept. 15, to vote on $150,000 bonds grading and graveling State Highway 21. Total cost $300,000.

Tex., Marlin—Falls Co. had plans prepared graveling 19 mi. Federal Aid Project 331, 18 ft. $321,000. J. P. Mehrung, Lott, engr.

Tex., McKinney—Collin Co. soon takes bids concrete paving 6.75 mi. State Highway 6, 18 ft. $300,000. F. W. Cawthon, co. engr. Noted May 3.

Tex., Novice — Coleman Co. (Coleman) plans election Sept. 22, to vote on $200,000 bonds highways in Novice Precinct, here. W. E. Dickerson, Coleman, co. engr.

Tex., Palo Pinto—Palo Pinto Co. soon takes bids bituminous macadam surfacing 3.37 mi. State Highway 1, 18 ft. $57,000. G. W. Courter, co. engr.

Tex., Paris—Lamar Co. had plans prepared concrete paving 1.58 mi. Paris-Blossom Highway, 18 ft. $47,000. W. M. Fooshee, co. engr.

Tex., Pearsall—Frio Co. election Sept. 18, to vote on $65,000 bonds hard surfacing State Highway in Rd. Dist. 4. R. E. Killmer, co. engr.

Tex., Riogrande—Starr Co. takes bids early in September, grading and graveling 32 mi. State Highway 12 between Samfordyce and Roma, also grading 16 mi. on State Highway 12, between Roma and Zapata Co. line. $350,000. V. H. Henderson, Austin, engr.

Tex., San Augustine—San Augustine Co. voted $50,000 bonds highway improvements. W. A. French, co. engr.

Tex., Sierra Blanci—Hudspeth Co. had plans prepared graveling 9.04 mi. State Highway 1, 18 ft. $35,400. J. W. Carter, El Paso, engr.

Tex., Sulphur Springs—Hopkins Co. plans election soon to vote on $90,000 bonds for road work. R. E. Bertram, co. judge.

Tex., Wichita Falls—Wichita Co. making plans concrete paving 6 mi. State Highway 30, 16 ft. $180,000. D. B. Sartin, co. judge.

Okla., Ardmore—Plans grading and paving 6 blocks Hickory St. from 5th to 11th Sts., 7,000 sq.yd. vertical fibre brick, 2,500 lin.ft. curbing, etc. $37,000. S. Mathews, Ardmore, engr.

Okla., Oilton—Plans improving 6 blocks Main St., 12,000 sq.yd. concrete 3,500 lin. ft. curbing, etc. $40,000. Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs.

Okla., Ponca City — Had plans prepared improving 7 blocks 7th St., et al., 11,000 sq.yd. vertical fibre brick, 2,600 lin.ft. concrete curb and gutter, etc. $60,000. J. P. Rickard, Ponca City, engr.

Okla., Poteau—Plans improving 11 blocks McKenna, Witte and Dewey Sts., 18,000 sq.yd. concrete, 7,000 lin.ft. curbing, etc. $80,000. J. E. Davis, Poteau, engr.

Okla., Stigler—Having preliminary plans prepared grading, curbing and concrete paving 14,150 sq.yd. Main, Holmes and 3rd Sts. $55,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

California—State Hy. Dept., Sacramento, rejected bids grading and graveling 11.5 mi. road between Beltane and Schellville, Sonoma Co. Noted Aug. 23.

Calif., Ft. Bragg — Had plans prepared improving main and Laurel Sts., etc., 264,290 sq.ft. grading, 2,300 lin.ft. concrete curb, 206,507 sq.ft. 3½ in. and 57,720 sq.ft. 4½ in. asphaltic concrete pavement, etc. C. C. Kennedy, Call Bldg., San Francisco, engr.

Calif., Huntington Park — Plans paving with 8 in. asphaltic concrete Santa Fe Ave., Saturn St., etc. To exceed $25,000. H. McCurdy, Pacific Electric Bldg., Los Angeles, engr.

Calif., Huntington Park — Making plans paving Albany St., 120,000 sq.ft. 4 and 5 in. asphaltic concrete. H. McCurdy, Pacific Electric Bldg., Los Angeles, engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving west portion Pacific Blvd., 11,905 sq.ft. removal of concrete walks, 3,033 cu.yd. excav., 22,418 sq.ft. concrete walks, 2,930 lin.ft. curb, 6,480 sq.ft. gutter, 4,744 sq.yd. concrete, 19,600 sq.ft. oil and screen roadway, etc.; east portion Pacific Blvd., 11,688 sq.ft. removal concrete walks, 2,559 cu.yd. excav., 22,685 sq.ft. walks, 2,862 ft. curb, 6,839 sq.ft. gutters, 22,400 sq.ft. oil and screen roadway, etc.

Calif., Richmond—Had plans prepared improving portions Main Ave., 2,140 cu.yd. excav., 42,515 sq.ft. macadam, 13,240 sq.ft. concrete walks, 4,070 sq.ft. concrete gutter, 2,809 lin.ft. concrete curb, etc. H. D. Chapman, city engr.

Calif., San Diego—Had plans prepared paving with 1½ in. warrenite and topeka on 3 in. asphaltic concrete or 1½ in. willite on 3 in. asphaltic concrete 13,752 sq.yd. Imperial Ave., also 17,682 sq.yd. 12th St. in Balboa Park. F. A. Rhodes, city engr.

Calif., San Leandro—Plans paving 4 mi. various streets.

Calif., Santa Rosa—Appropriated $30,000 bonds paving various street intersections. L. L. Mills, city engr.

Calif., Stockton—San Joaquin Co. having plans prepared oil macadam paving 2½ mi. Harney Lane Rd., also 2½ mi. Terminous Rd. To exceed $25,000. F. E. Quail, co. surv.

Calif., Visalia—Had plans prepared improving portions West Center, North Giddings Sts., etc., 4,631 cu.yd. grading, 212,757 sq.ft. 1½ in. warrenite bitulithic on 4 in. base, 2,731 lin.ft. concrete curb, 7,875 lin.ft. gutter, etc. L. H. Gadsby, city engr.

Calif., Woodland—Yolo Co. had plans prepared furnishing and spreading 4,000 cu.yd. 1 to ¼ in. crushed rock or gravel on portions Jefferson Blvd. A. C. Proctor, co. surv.

Que., Montreal—Plans asphalt pavements on Nicolet St., $19,700, Fabre St., $34,000, Garnier St. $30,000, Marquette St. $69,600, Adam St. $4,193, Villemarie St. $28,449, Addington St. $22,660, Angers St. $66,420, Amherst St., $50,050, St. Cunegonde St., $12,980, Parthenais St., $25,835, Hochelaga St., $25,161; concrete sidewalks on Pie IX and St. Joseph Blvds., Madison and 5th Aves., Hochelaga, Drolet, Lajeunesse, Baby, Rivard, Drolet, Chambord, Hector, Villemarie, Patricia, 9th, 8th, Nanyc, Northmount, Namur, Marquette, Rachel, Therrien and Moreau Sts., $137,417.

Que., Montreal—Voted $800,000 bonds for streets and roads, sidewalks, subways, etc. E. Gauthier, asst. city clk.

BIDS DESIRED

New York—Sept. 14, by F. S. Greene, comr. highways, Albany, reconstructing highways in Dutchess, Jefferson, Monroe, Otsego, Saratoga, Washington and Westchester Counties. W. A. Patton, secy.; adv. E. N.-R. Sept. 6.

N. Y., Brooklyn—Sept. 12, by E. Riegelmann, boro pres., Boro Hall, repaving 67th and Joralemon Sts., Georgia, Prospect, Schenectady, Forrest and Manhattan Aves., also Prospect Ave. from 8th to 16th Aves., permanent asphalt, 41st St., Kent and Forrest Aves., grade 1 granite; paving Kings Highway asphalt; grading Flatbush Ave.

N. Y., Long Island City—Sept. 10, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc. on Beach 92nd St.

N. Y., Niagara Falls—Sept. 10, by E. J. Fort, city mgr., repairing and relaying portions of roadbed and road in 3 mi. Main St. along line of International Ry. tracks, 15-24 ft. $81,900.

N. Y., St. George — Sept. 13, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Myrtle and Davis Aves., bituminous concrete concrete curbing and guttering, etc., Benziger Ave. (4th Ave.).

N. J., Asbury Park—Sept. 24, by State Hy. Dept., Trenton, paving Route 4, Sect. 22, Main St., here, Monmouth Co., sheet asphalt and stone block. A. L. Grover, ch. clk.; adv. E. N.-R. Sept. 6. Noted Aug. 9.

N. J., Belvidere—Sept. 19, by Bd. Freeholders Warren Co., grading Hainesburg-Columbia Rd., 31,016 cu.yd. excav. H. W. Vetter, co. engr. Adv. E. N.-R., Sept. 6.

N. J., Jersey City—Sept. 13, by Bd. Freeholders, Hudson Co., paving with sheet asphalt on repaired macadam, 20,600 sq.yd. County Ave., Secaucus. F. J. Radigan, co. engr.

N. J., Newton — Sept. 20, by Bd. Freeholders Sussex Co., constructing Fredon Stillwater Rd., Sect. 2, Stillwater Twp. H. Snook, co. engr.; adv. E. N.-R. Sept. 6.

Pa., Greensburg—Sept. 10, by Comrs. Westmoreland Co., resurfacing 2.4 mi. (more or less) Latrobe-Beatty Rd., Unity Twp., willite, warrenite bitulithic, sheet asphalt or amesite. W. A. Arter, co. controller.

Pa., Cresson—Sept. 12, by Boro. Council, 5,600 sq.yd. vitr. brick pavement, 3,350 lin.ft. cement curb in 2nd St. D. W Dillman, 80-81 Altoona Trust Bldg., Altoona, engr.

Delaware—Sept. 19, by State Hy. Dept., Dover, grading and concrete paving 0.622 mi. Contr. CK 18 through Clayton; 2.16 mi. Contr. CS 26, Clarks Cross Rds. to Bridgeville; 1 mi. Contr. CS 29 through Greenwood; adv. E. N.-R. Sept. 6.

Maryland—Sept. 11, by State Rds. Comm., Baltimore, concrete paving 1 mi. Contr. CI-43, Carroll Co., from New Windsor toward Englars Mill; adv. E. N.-R. Sept. 6.

Virginia—Sept. 17, by State Hy. Comm., Richmond, improving 39.3 mi. roads in Appomattox, Buckingham, Northampton, Albemarle, Russell, Wight and Wise Counties; improving 5.99 mi. road and constructing bridges in Henrico and Hanover Counties, constructing bridges in Montgomery and Smyth Counties. H. G. Shirley, chn.; adv. E. N.-R. Sept. 6.

Florida—Sept. 27, by State Rd. Dept., Tallahassee, grading and concrete or asphaltic paving 0.701 mi. Project 37 A, Alachua Co., 3.261 mi. Project 37 C, Alachua Co.; grading, dredging embankment and surface treating 2.14 mi. Project 37 D, Alachua Co., 2.3 mi. Project 38 A, Escambia Co.; grading, surface treating and 8 in. rock base on Project 40 D, Brevard Co., 16.169 mi. Project 40 A, Brevard Co., 16.28 mi. Project 597, Volusia Co. J. L. Cresap, Tallahassee, engr.

Fla., Gainesville—Sept. 14, by Alachua Co., surface treating 52,800 sq.yd. Rd. 2 from Daysville to Wacahoota, $25,000, 60,000 sq.yd. Rd. 3 from Gainesville to Newbury, $30,000; grading Rd. 4 from Santa Fe River at Worthington Springs and Rd. 7 from Orange Heights to Melrose, 58,400 cu.yd. excav., 70 acres clearing, $25,000. A. B. Gross, Gainesville, engr.

Fla., Leesburg—Sept. 24, by Bd. Comrs. and D. E. Bivens, city mgr., 60,000 sq.yd. paving with necessary curb and gutter. H. S. Jaudon Eng. Co., Elberton, Ga., engrs.; adv. E. N.-R. Sept. 6.

Alabama—Sept. 18, by State Hy. Comm., Montgomery, improving 9.756 mi. Butler-Meridian Rd., Federal Aid Project 134, Choctaw Co., 1,904 sta.yd. overhaul, 97,399 cu.yd. excav., 1,023 cu.yd. concrete, 123,635 lb. reinforcing, 24,000 cu.yd. gravel, etc. W. S. Keller, state highway engr.

Streets and Roads (Continued)

Ala., Tuscaloosa—Sept. 20, by Tuscaloosa Co., resurfacing with gravel and cinders 19½ mi. Birmingham-Tuscaloosa Rd., 30 ft. $55,000.

Louisiana—Sept. 18, by State Highway Comn., Reymond Bldg., Baton Rouge, constructing 9 mi. Sect. A, and 7.409 mi. Sect. B of Federal Aid Project 81, St. Francisville-Mississippi Highway, West Feliciana Parish. J. M. Fourmy, ch. engr.

Louisiana—Sept. 18, by State Hy. Comn., Reymond Bldg., Baton Rouge, 6.515 mi. State Project 383, Sects. A and C, Opelousas-Lafayette Highway, St. Landry Parish, also fifteen 19 ft. spans over Bayou Carencno. J. M. Fourmy, ch. engr.

Miss., Corinth—Sept. 11, by Bd. Supervs. Alcorn Co. at office Chancery Clerk, improving road and installing bridges over 20 ft. span, on 9.794 mi. Federal Aid 149, from here to Iuka, 79,367 cu.yd. earth and 5,196 cu.yd. borrow excav., 48,605 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr.

Miss., Forest—Sept. 10, by Bd. Supervs. Scott Co. improving road and installing bridges over 20 ft. span on 6.7 mi. Federal Aid Project 134, between here and Morton, 28,830 cu.yd. earth and 13,701 cu.yd. borrow excav., 37,598 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr. Noted Aug. 2.

Miss., McComb—Sept. 14, by W. T. Denman, state highway comr., City Hall, grading and paving 2.863 mi. Felders Camp Grounds Rd., 13,010 cu.yd. earth and 480 cu.yd. borrow excav., 2,525 cu.yd gravel, etc, 1.715 mi. River Rd., 8,418 cu.yd. earth and 841 cu.yd. borrow excav., 76.92 cu.yd. concrete 7,265 lb. reinforcing, 1,509 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr.

Miss., Pittsboro — Sept. 12, by Bd. Supervs. Calhoun Co., at office Chancery Clerk, improving road and installing bridges on 19.122 mi. Federal Aid 152, from Grenada to Houston, 122,724 cu.yd. earth and 136,979 cu.yd. borrow excav., 10,320 cu.yd. gravel, etc. H. C. Dietzer, Jackson, state highway engr.

Miss., Walthall — Sept. 13, by Bd. Supervs. Webster Co., improving 12.866 mi. from Calhoun City to Ackerman, Federal Aid Project 157, 25.5 acres clearing and grubbing, 95,548 cu.yd. earth excav., 49,230 cu.yd. borrow, 78,114 lb. reinforcing, etc., also installing bridges over 20 ft. span on same. H. C. Dietzer, Jackson, Miss.

Miss., Water Valley — Sept. 19, by Bd. Supervs. Yalobusha Co., Court House, constructing road and installing bridges over 20 ft. span on 12.492 mi. Federal Aid Project 161, from Grenada to Holly Springs, 60,628 cu.yd. borrow and 72,699 cu.yd. borrow excav., 73,632 cu.yd. gravel, 28,023 sq. yd. concrete, etc. H. C. Dietzer, Jackson, state highway engr.

Ohio—Sept. 14, by L. A. Boulay, dir. Highways and Pub. Wks., Columbus, widening and paving 13,242 ft. Sect. B, Youngstown-East Liverpool Highway, 16 ft., bituminous macadam. $58,461.

O., Cleveland—Sept. 12, by city, paving Steine Court, Hood and Parkview Aves., and West 23rd, West 41st and West 88th Sts., vitr. brick. To exceed $25,000. R. Hoffman, city engr.

O., Cleveland—Sept. 12, by Cuyahoga Co. paving Miner Rd., waterbound macadam. $48,071. F. R. Lander, Court House, engr.

O., Lisbon—Sept. 14, by Columbiana Co. resurfacing 2 mi. Goshen Rd., 20 ft., bituminous macadam. $30,800. L. Kirk, Courthouse, engr. Noted Aug. 9.

Michigan—Sept. 11, by State Hy. Dept., Lansing, grading 4.197 mi. Federal Aid Project 50 Sect. B, Monroe Co., 41,579 cu. yd. excav., etc. Former bids rejected. Noted Aug. 29.

Ia., Wapello—Sept. 11, by Auditor Louisa Co., grading 7.001 mi. primary road from here south to Des Moines Co. Line, 79,551 cu.yd. earth excav., 5,300 ft. tile, etc. Iowa Hy. Comn., Ames, engrs.

Minnesota—Sept. 26, by State Hy. Dept., St. Paul, 18 mi. State Project 6-39, Sect. 1, Federal Aid Project 332, 190,000 cu.yd. excav., two 20 ft. slab spans for Bridge 4104, portable and monolithic culverts, $50,000 27 mi State Project 4-27, Federal Aid Project 218, 344,000 cu.yd. excav., 180 ft. truss span, Bridge 3956, $90,000; 13 mi. State Project 2-24, Federal Aid Project 129, 26,500 cu.yd. gravel surfacing, $25,000; 16 mi. State Project 23-22, Federal Aid Project 243, 18,700 cu.yd. gravel surfacing, $25,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Minn., **Ivanhoe**—Sept. 17, by A. L. Swenson, aud. Lincoln Co., gravel surfacing 15 mi. State Project 6-07, 24 ft., from here to north co. line. $25,000. State Highway Dept., 1246 University Ave., St. Paul, engrs.

Kan., Bronson—Sept. 24, by Clerk Bourbon Co., grading, and concrete surfacing 1.076 mi. Ft. Scott-Wichita Road, Federal Aid Project 117. B. Boyle, Ft. Scott, co. eng.

Kan., Independence—Sept. 25, by Clerk Montgomery Co., grading and surfacing with bituminous macadam 5.141 mi. Independence Caney Rd., 18 ft., Federal Aid Project 121. H. K. Hubbard, co. engr. Noted Aug. 16.

Kan., Kansas City—Sept. 11, by O. K. Williamson, engr. Wyandotte Co., improving 2½ mi. Gibbs road, 16 ft., 18,815 cu.yd. earth excav., 28,258 sq.yd. rock asphalt, 878 cu.yd. crushed rock, 28,258 sq.yd. scarifying. Former bids rejected.

South Dakota—Sept. 11, by State Hy. Dept., Pierre, hard surfacing 1 mi. Federal Aid Project 12, Minnehaha Co. F. D. Hudgins, ch. engr.

Wyoming—Sept. 11, by State Hy. Comn., Cheyenne, grading, surfacing, etc., 8.4 mi. Federal Aid Project 149, Clearmont-Cadiz Rd., Sheridan Co., 24 ft., $127,000. Z. E. Sevison, state highway engr.

Mo., Independence—Sept. 10, by L. E. Koehler, city engr., repairing, grading and surfacing 75,353 yd. road incl. 2,000 ft. 6 in. and 4,000 ft. 8 in vitr. tile.

ROAD WORK—DELAWARE

Bids were opened July 25, by State Highway Dept., Dover, for constructing 2.200 mi Maryland-Glasgow Rd., Contr. CN-12. (A) A. H. McDowell, Marshallton; (B) D. W. Robbins, Inc., Utica, N. Y.; (C) D. E. O'Connell & Sons, Ridley Park, Pa. The unit bids were as follows:

	A	B	C
0.3 acres clearing	$400.00	$400.00	$900.00
0.3 acres grubbing	400.00	400.00	900.00
16,000 cu.yd. excavation	1.30	1.30	1.60
100 tons stone base course	5.00	5.90	5.80
3,800 cu.yd. concrete pavement	16.30	16.45	16.40
120 cu.yd. class A concrete	32.00	34.00	35.00
4,200 lb. reinforcement	.10	.10	.10
300 lin.ft. 15 in. R.C. pipe	3.00	3.40	3.00
150 lin.ft. 18 in. R.C. pipe	4.50	4.10	4.00
60 lin.ft. 24 in. R.C. pipe	6.00	6.10	6.50
100 lin.ft. relaid pipe	1.25	1.50	1.50
1,000 lin.ft. 4 in. underdrain	1.00	.75	1.00
800 sq.yd. concrete gutter	2.50	2.30	2.60
600 lin.ft. W.C. guard rail	.50	.65	.50
1,200 lin.ft. wd. shoulder curb	.50	.40	.50
Extended totals	$93,780	$94,251	$99,680

ROAD WORK—VIRGINIA

Following are lowest three bids opened July 25, by State Highway Comn., Richmond, for constructing road between Providence Forge and Bottoms Bridge, New Kent Co., (A) Van Doren Bros., Richmond; (B) McDowell Constr. Co., Marion, N. C.; (C) Burgess & Atkisson, Scottsville, Va. The unit bids were as follows:

	A	B	C
37.13 acres clearing and grubbing	$200.00	$250.00	$125.00
84,060 cu.yd. excavation	.41	.40	.54
14,375 cu.yd. borrow excavation	.40	.42	.54
532.82 cu.yd. class "A" concrete	29.00	26.00	23.00
790.24 cu.yd. class "B" concrete	22.50	22.00	20.00
49,183 lb. reinforcing steel	.08	.10	.08
168 lin.ft. 15 in. concrete pipe	3.00	2.25	2.50
1,606 lin.ft. 18 in. concrete pipe	3.75	3.50	3.00
302 lin.ft. 24 in. concrete pipe	5.00	4.50	4.50
7,630 lin.ft. wooden guard rail	.60	.50	.50
2,000 lin.ft. timber piling	1.10	1.50	1.25
27,143 cu.yd. gravel	.55	.70	.85
Extended totals	$126,006	$130,101	$138,351

ROAD WORK—VIRGINIA

Following are lowest three bids opened July 25, by State Highway Comn., Richmond, for constructing road between Grundy & Hanger, Buchanan Co., (A) Waugh & Longley, Bluefield, W. Va.; (B) R. H. Bolling, Norton; (C) Clintwood Constr. Co., Clintwood. The unit bids were as follows:

	A	B	C
32.4 acres clearing and grubbing	$90.00	$150.00	$100.00
121,885 cu.yd. excavation	.78	.78	.75
307 cu.yd. class "A" concrete	25.00	30.00	35.00
329 cu.yd. class "B" concrete	21.00	25.00	32.00
29,224 lb. reinforcing steel	.10	.10	.15
244 cu.yd. dry rubble masonry	6.00	5.00	6.00
2,380 lin.ft. 15 in. concrete pipe	3.00	3.50	4.50
844 lin.ft. 18 in. concrete pipe	4.25	4.50	5.00
442 lin.ft. 24 in. concrete pipe	6.50	6.00	6.50
2,380 lin.ft. 16 in. C.I. pipe			
844 lin.ft. 18 in. C.I. pipe			
442 lin.ft. 24 in. C.I. pipe			
20,464 lin.ft. wooden guard rail	.50	.50	.70
115 lin.ft. wooden guard rail with steel posts	.75	1.50	1.00
Extended totals	$154,962	$161,361	$169,418

DAM, ETC.—NEW YORK

Bids were opened July 31, by Bd. Water Supply, Municipal Bldg., New York City, for clearing and grubbing the Schoharie Reservoir and constructing a diverting dam in towns of Gilboa and Conesville, Schoharie Co., Plattsville, Greene Co., and Roxbury, Delaware Co., (A) Rice & Ganey, Inc., Grand Central Terminal, New York City, (awarded contract); (B) Ward & Tully, Inc., 189 Montague St., Brooklyn; (C) S. K. Johnson, Norwich. The unit bids were as follows:

	A	B	C
1,300 acres clearing	$60.00	$52.00	$120.00
250 acres clearing and grubbing	350.00	300.00	400.00
15,000 cu.yd. earth excavation	2.00	2.25	1.50
100 cu.yd. rock excavation	6.00	7.00	10.00
1,700 bbl. portland cement	4.00	5.00	5.00
1,200 cu.yd. concrete masonry	18.00	20.00	20.00
3,500 cu.yd. rock-filled timber crib	12.00	15.00	5.00
50 M. ft. B.M. timber and lumber	100.00	240.00	100.00
9,000 lb. iron and steel	.10	.10	.20
Diversion dam (lump sum)	10,000.00	16,500.00	3,200.00
400 acres ordered second cutting of cleared areas	10.00	30.00	20.00
200 cu.yd. removing excrementitious material	10.00	10.00	5.00
600 cu.yd. rip-rap	4.00	10.00	5.00
Extended totals	$290,800	$312,100	$351,500

Streets and Roads (Continued)

Mo., St. Louis — Sept. 25, by Bd. Pub. Serv., Room 208, City Hall, 4,500 sq.yd. granitoid sidewalks, 5 and 6 ft. in Kingshighway Memorial Dr., Ashland, Kennerly, Lurd, Fair, West Florissant, Beacon, Linton, DeSoto, Blair, Southwest, Adkins Varrelmann McCausland and Minnesota Aves. $27,750.

Mo., St. Louis—Oct. 2, by Bd. Pub. Serv., Room 208 City Hall, paving 7 alleys with concrete in blocks 4541, 5243, 5255, 5467 and 5577, $28,825; paving and granite curbing 3,950 sq.yd. Gamble St., bitulithic on concrete, $39,600.

Tex., Alpine—Sept. 20, by M. S. Burke, judge Brewster Co., improving 8.53 mi. State Highway 12, from Alpine to Jeff Davis Co. line, 49,529 cu.yd. earth excav., 1,657 sq.yd. concrete paving, 22,031 cu.yd. gravel and caliche, 34,349 lb. reinforcing, etc., $48,610; graveling and caliche surfacing 15.7 mi. State Highway 12 from Alpine to Altuda, 79,033 cu.yd. earth excav., 3,463 sq.yd. concrete paving, 18,400 cu.yd. stripping pits, 13,170 cu.yd. screening surface material, 62,040 lb. reinforcing, etc., $88,635. A. L. White, co. engr. Noted Aug. 23.

Tex., Bonham—Sept. 15, by S. E. Neilson, judge Fannin Co., rein.-con. paving 1 mi State Highway 1, through Honey Grove, 18 ft. $37,000. P. B. Price, Honey Grove, engr.

Tex., Conroe—Sept. 15, by W. A. Lee, judge Montgomery Co., graveling 22.13 mi. State Highway 19, from Wills to Harris Co. line, 16 ft. $190,000. W. J. Kelly, Conroe, engr.

Tex., Honey Grove—Sept. 15, concrete paving ¾ mi. East Market St., 27 ft. To exceed $25,000. P. B. Price, Honey Grove, engr.

Okla., Clinton—Sept. 18, by W. A. Shouse, city clk., grading and paving 7 blocks Frisco, 5th and Dewey Sts., 9,000 sq.yd. asphalt, etc. $45,000. B. M. Hart, City Hall, Oklahoma City, engr.

Okla., Davis—Sept. 12, by F. A. Crossett, city clk., grading and paving Main St., 8,500 sq.yd. 7 in. concrete, 4,500 lin.ft. curbing, etc. $28,000. E. T. Archer, New England Bldg., Kansas City, Mo., engr. Noted May 31.

Okla., Waurika—Sept. 18, by R. McGuire, city clk., grading and paving Main, Bway., C, D, E and F Sts., 27,000 sq.yd. vertical fibre brick, 14,000 lin.ft. curbing, 14,000 lin. ft. gutter, 8,500 cu.yd. excav., etc. $190,000. F. E. Devlin, Wichita, Kan., engr. Noted July 12.

Okla., Wilson—Sept. 11, by H. T. Brown, city clk., grading and graveling Main and Fint Sts., 18,700 sq.yd. gravel, 11,000 lin.ft. curbing, etc. $60,000. McIntosh Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Wash., Kelso—Oct. 1, by A. J. Branscow, city clk., grading and paving Dist. 48, 136,377 sq.yd. 4 in. concrete sidewalk, 41,320 cu.yd. earth, 365 cu.yd. loose and 1,394 cu.yd. solid rock excav., etc. $80,000. W. G. Jackson, city engr.

California—Sept. 17, by State Hy. Comn., Sacramento, surfacing with gravel or broken stone 11.1 mi. road between 2 mi. south of Weaverville and Tom Long Gulch, Trinity Co.; gravel surfacing 12.7 mi. road between 3 mi. east of Chester and 3 mi. east of Westwood, Plumas and Lassen Counties. R. M. Morton, state highway engr.

Calif., Marysville—Sept. 12, by Yuba Co., graveling 3½ mi. Woodruff and La Porte Rds. J. R. Meek, co. surv.

BIDS RECEIVED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, Aug. 29, resurfacing (1) Delamere Pl. (2) Gravesend Neck Rd. (3) Ave. N, (4) roadway of 67th St., with bituminous macadam, grading, curbing and flagging (5) Sheepshead Bay Rd., repaving (6) 41st St., block asphalt (7) Bergen St. (8) Division Ave. (9) 60th St. (10) 79th St. asphalt on concrete, (11) roadway of Flushing Ave., (12) roadway of Furman St. (13) roadway of Prospect Ave., grade 1 granite, from Galecor Contg. Co., 507 Greenwich St., New York City, (1) $7,003 (2) $15,118 (3) $7,540 (4) $16,297; Cranford Co., 52 9th St., (5) $66,333 (10) $30,187; Hastings Paving Co., 25 Broad St., New York City, (6) $9,934; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (7) $8,730 (9) $11,978; Borough Asphalt Co., 1301 Metropolitan Ave., (8) $10,424; Greico Bros., 172 Russell St., (11) $35,267 (12) $7,642 (13) $81,470. Noted Aug. 23.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Aug. 29, paving with permanent pavement on concrete, from Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, Fresh Pond Rd. from Metropolitan Ave. to Woodbine St., $56,400, and from Mt. Olivet Ave. to Metropolitan Ave., $68,399. Noted Aug. 23.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Aug. 30 repaving with sheet asphalt (1) Astoria Ave., paving with permanent pavement on asphalt (2) Ditmars Ave., grading, curbing, laying sidewalks, etc. (3) Graham Ave. (4) Weirfield St. (5) Woodside Ave., regarding sidewalk space and laying sidewalks (6) 16th Ave., grading (7) Queens Blvd., from W. P. McDonald Constr. Co., 17 West 42nd St., New York, (1) $61,230; Uvalde Asphalt Paving Co., 1 Bway., New York, (2) $38,800; C. Curth. (3) $11,878 (6) $2,031; Welsh Bros. Contg. Co., Inc., 32 Queens St., Astoria, (5) $25,071 (7) $52,845; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (4) $6,030. Noted Aug. 23.

N. J., Newark—G. C. Bergen, purch. agt. Essex Co., Aug. 28, paving 21,000 ft. Mt. Pleasant Ave., 2½ ft. 2 in. asphaltic concrete shoulders on stone base, on both sides of existing pavement, from Osborne & Marsellis, Bellevue Ave., Montclair, $21,055; grading and paving 16,000 ft. Campbell Ave., Caldwell, 33 ft., 2 in. asphaltic concrete on 6 in. concrete, from Franklin Contg. Co., 20 Washington Pl., $28,219; concrete sewers in 5,000 ft. Harrison Ave. Roseland, from J. F. Boylan, Belleville, $13,924. Noted Aug. 23.

Delaware—State Hy. Dept., Dover, grading and paving 4.22 mi. road from Clarksville to Bethany Beach, Contr. CS-27, from Highway Engr. & Constr. Co., Shelbyville, stone concrete $122,419, slag concrete $117,539 0.518 mi. concrete road through Fredericka, Contr. CK-17, from Juniata Co., Empire Bldg., Phila., $19,738; temporary timber bridge at Seaford, Contr. 42-A, from Delaware Constr. Co., Wilmington, $4,733. Noted Aug. 9.

Md., Baltimore — Bd. Awards, paving streets, Contr. 242-NA, 14,000 sq.yd. asphalt, from Amer. Paving Co., Montebello, $64,367; Contr. 243-NA, 22,000 sq.yd. asphalt, from D. Marine, Knickerbocker Bldg., $56,738. Noted Aug. 23.

Florida — State Rd. Dept., Tallahassee, surfacing 7.121 mi. road between Wabasso and Sebastian River, Project 36 E, St. Lucie Co, 75,205 sq.yd. bituminous macadam on broken stone, from C. F. Lytle, Jacksonville, $252,358; 9.517 mi. road between Pasco Co. line and Brooksville, Project 545, Hernando Co., 89,326 sq.yd. bituminous macadam on broken stone, from Broadbent and Groeting, Ocala, $294,045. Noted Aug. 16.

Kentucky—State Hy. Dept., Frankfort, surfacing with waterbound macadam using concrete pipe 5.409 mi. Hodgensville-Buffalo Rd., State Project 41, Sect. A, Larue Co., from McClellan & Campbell, Bowling Green, 27,401 cu.yd. earth excav. at $0.47 per cu.yd., 1,115 cu.yd. macadam excav. $1, 2,271 cu.yd. borrow $0.50, etc., total $113,704; grading using concrete pipe 3.996 mi. Hazard-Whitesburg Rd., State Project 4, Sect. C, Perry Co., from J. C. Williams, Winchester, 25,707 cu.yd. earth excav. $0.40, 8,088 cu.yd. loose rock excav. $0.70, 44,189 cu.yd. solid rock excav. $0.90, etc., total $77,463, 2.646 mi. Hazard-Jackson Rd., State Project 4, Sect. B, Perry Co., from Codell Constr. Co., Winchester, 28,457 cu.yd. earth excav. $0.48, 19,025 cu.yd. solid rock excav. $0.75, 15,108 sta.yd. overhaul $0.03, etc., total $46,884; reconstructing road from Williamstown to Falmouth Rds., State Projects 62 C and 21 C, Pendleton Co., 8,000 tons crushed stone, from Broaddus & Forbes, Richmond, $14,960; surface treating 5.409 mi. Hodgensville-Buffalo Rd., State Project 41, Sect. A, Federal Aid Project 107, Larue Co., from R. B. Tyler Co., 114 South 4th St., Louisville, $8,017; 1 concrete culvert and approaches on Midland Trail, State Project 17, Sect. C, Shelby Co., 2,800 cu.yd. borrow, 4,526 lb. reinforcing, etc., from Monahan & Turner, Lexington, $4,274. Noted Aug. 2 and 9.

Michigan — State Hy. Dept., Lansing, grading and surfacing 4.197 mi. Federal Aid Project 50, Monroe Co., from Townsend, Shuttleworth & Ballmer Co., 306 South Capitol St., Lansing, $136,437; also 60 ft. concrete arch Bridge 580,902, near Monroe, from E. C. Nolan & Son, 1497 Collingwood Ave.; Detroit, $23,957. Noted Aug. 16.

N. D., Napoleon—Logan Co. grading 8 mi. Federal Aid Project 188, 63,000 cu.yd. excav., etc., from H. Knudson, Adrian, $27,517.

Mo., St. Louis — Bd. Pub. Serv., Room 208 City Hall, Aug. 28, 2,180 sq.yd. vitr. brick on DeSoto St., 920 sq.yd. on Christy Ave., and 1,145 sq.yd. on Lip[illegible] Ave., from Eyermann Constr. Co, 1216 South Grand Ave., $12,344, $5,058 and $6,[illegible] respectively; 7,450 sq.yd. bitulithic on Whittier Ave., and 5,335 sq.yd. on Ohio Ave., from Granite Bituminous Paving Co., Ry. Exch. Bldg., $15,938 and $28,449 respectively; 1,479 sq. yd. refined asphalt on Compton Ave., from Trinidad Asphalt Paving Co., Title Guaranty Bldg., $4,211. Noted Aug. 2.

Ariz., Phoenix—Grading and paving 7th and 9th Aves., Roosevelt, Portland, Latham, West Moreland, Culver, Willetta and Lynwood Sts., from Kisselburg, Smith & Hitchcock, 116 South 18th Ave., $11[illegible]850. Noted Aug. 9.

Calif., Los Angeles—Improving Hobart Blvd. between Lemon Grove and Melrose Aves., from G. R. Curtis, 2[illegible] East 26th St., total for grading $2,000, 24,342 sq.ft. bituminous base at $0.19 per sq.ft., 1,236 ft. curb $0.65, 3,310 sq.ft. walks $0.20, etc., 10th St. between Gaffney and Meyler Sts., from Griffith Co., Railway Bldg., total for grading $4,200, 152 sq.ft. asphalt $0.35, 81,077 sq.ft. concrete $0.22, 3,337 ft. curb $0.65, 17,262 sq.ft. walks $0.22, etc.

Calif., Sacramento—Improving Freeport Blvd., from McGillivray Constr. Co., Capitol Natl. Bank Bldg., 3,912 ft. curb and gutter at $1.78 per ft., 6,491 cu.yd. excav. $1, 2,306 cu.yd. fill $0.25, 86,026 sq.ft. pavement $0.215, etc.

Que., Montreal—Asphalt pavements from Quinlan, Robertson & Janin Ltd., 52 Duluth Bldg., 2,805 sq.yd. Rose de Lima St., $14,350, 8,300 sq.yd. Jacques Hertel St., $54,000, 1,741 sq.yd. Rosemount Blvd. $11,920; Sicily Asphaltum Paving Co., 69 St. Viateur St., 6,480 sq.yd. De La Roche St., $28,850, 2,900 sq.yd. De Gaspe St., $12,897; concrete sidewalks from Rondou Cortier & Co., 3506 Christophe Columb St., 660 sq.yd. Valmont St., $5,937; J. Toralli, 186 St. Marquerite St., 1,070 sq.yd. Harvard Ave., $5,409, 1,050 sq.yd. Old Orchard Ave., $5,475; Leger & Lamoureaux Ltd., St. Denis Bldg., 1,810 sq.yd. St. Gerard St., $6,933, 1,285 sq.yd. Boyer St., $6,265, 3,500 sq.yd. 3rd Ave., $21,507; F. Lapan, 601 Lacordaire St., 1,340 sq.yd. Grey Ave., $6,164, 1,350 sq.yd. 2nd Ave., $6,965. Noted Aug. 16.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, paving 28,282 lin.ft. Nepaug Rd., in New Hartford, and 10,480 lin.ft. Mansfield Depot-Storrs Highway, in Mansfield, both bituminous macadam, and 13,200 lin.ft. Putnam-Norwich Rd., in Putnam and Killingly, rein.-con., to A. Vito Co., Thomaston, $188,129, $67,479 and $77,714 (cement furnished by state), respectively; 3,700 lin.ft. Farmington trunk line, Farmington, sheet asphalt to E. Balf Co., 26 State St. $30,004 (cement furnished by State); 18,191 ft. Shore Rd., in Clinton and Madison, plain and rein.-con., to Connecticut Natl. Pavements Inc., New Haven, $159,956 (cement furnished by State); 6,413 ft. Bethlehem-Woodbury Rd., in Woodbury and Bethlehem, resurfacing with 8 in. waterbound macadam, to J. DeMichiel & Bro., 58 High St., Torrington, $24,016; 18,122 lin.ft. Housatonic Rd., in Kent, rein.-con., and 5,518 lin.ft. Cooke Ave., in Plainville, plain concrete, to Osborn-Barnes Co., Odd Fellows Bldg., Danbury, $135,252 and $17,051 respectively (cement furnished by State); 19,250 lin.ft. Nichols Rd., rein.-con., in Trumbull, to Bridgeport Constr. Co., 983 Broad St., Bridgeport, $92,544 (cement furnished by State); concrete bridge in Canton, to L. Suzio Constr. Co. State and Broad Sts., $17,061 (cement furnished by State). Noted Aug. 16.

New York—C. H. Smith, supt. highways, Orange Co., Times Press Bldg., 15 King St., Middletown, bituminous macadamizing 3 mi. road in town of Warwick, also concrete paving 3.75 mi. road in towns of Minisink and Greenville, to Schunnemunk Constr. Co., Highland Mills, $280,126. Noted Aug. 2.

Pennsylvania—State Hy. Dept., Harrisburg, improving roads (A. means Application and R. means Route), 18,206 ft. A. 2573-74 and 75, Delaware Co., to V. DiFrancesco, Llanerch, $176,287; 2,203 ft. A. 2578, Beaver Co., to D. W. Challis & Sons, 420 Centennial Ave., Sewickley, $36,055; 3,666 ft. R. 163, Lehigh Co., to S. N. Weaver, Allentown, $64,697; 20,005 ft. R. 175, Northampton Co., to Juniata Co., 410 Empire Bldg., Phila., $111,190; 13,627 ft. R. 165 and 166 Northampton Co., to McInerney & McNeal, Easton, $134,918; 12,017 ft. R. 111, Greene Co., to Myers Paving Co., Waynesburg, $37,394. Noted Aug. 16.

Alabama—State Hy. Dept., Montgomery, grading and graveling 11.32 mi. Dublin-Orion Rd. on Bee Line Highway, Montgomery Co., to J. W. Gwinn, Hamilton Sts., Birmingham, $159,699. Noted Aug. 9.

Streets and Roads (Continued)

Pa., New Castle—Repaving East Washington St., vitr. brick, to **M. J. Scanlon**, New Castle, $21,603.

W. Va., Moundsville—Marshall Co. grading and improving River Rd. south of here, to Keeley Constr. Co., Clarksburg, $43,000.

Fla., Deland—Volusia Co. constructing 39.5 mi. road in Turnbull Special Road and Bridge Dist., Coquina rock, to G. Abbott, New Smyrna, and brick and rock base to J. Y. Wilson, Clark Bldg., Jacksonville, total $360,000. Noted July 26.

Fla., Tampa—Curbing and paving with 2½ in. asphalt blocks Lake, Tampania and Branch Aves., to Cone Bros., Tampa, $19,393; Nordica Ave., to W. L. Harwell, 721 South Orleans Ave., $6,461. Noted Aug. 8.

La., Abbeville — Improving Perry and Abbeville Rds. to Goldberg & Rochel, New Iberia, $7,382; Kaplan Route Rd., to Banta & Muterspaugh, Crowley, $16,282; Erath Route, to Lafayette Constr. Co., Abbeville, $19,213. Noted Aug. 2.

La., Ruston—For 16,295 sq.yd. asphaltic concrete pavements on various streets, to C. W. James Constr. Co., Shreveport, $65,000.

Tennessee — Dept. Highways and Pub. Wks., Nashville, grading, etc., 14.65 mi. State Project 113, 16 ft., Scott Co., to R. E. Martin, Mountain City, $137,595.

Tenn., Pulaski — Paving 13,000 sq.yd. various streets, rock asphalt on limestone, to E. T. Lewis, Constr. Co., 1902 Elliott Ave., Nashville, $18,912. Engrs. est. $25,000. Noted Aug. 16.

O., Akron—Dept. Pub. Serv., improving Hammel St., 1,400 cu.yd. cinders, to M. Kalain, $14,895, engrs. est. $18,657; Keeney St., 350 cu.yd. cinders, to Hollinger & Davidson, $4,659, $5,413; Dayton St., 1,100 sq.yd. standard brick, asphalt fill, to McAlonan Bros., 197 West Buchtel Ave., $9,718, $10,218; Newton St., 103 cu.yd. concrete, to G. S. Hiser, $3,024, $3,883.

O., Cleveland — Paving Mountclair and Ruby Aves., to Roehl Bros. Paving & Constr. Co., West 25th St. and Lorain Ave., $25,458 and $14,738 respectively; Lenecrave Ave., to Highway Constr. Co., 903 Lorain County Bank Bldg., Elyria, $44,997. Work involves 15,710 sq.yd. vitr. brick on concrete, 10,740 lin.ft. stone curb and 4 in. tile gutter, etc. Noted Aug. 23.

O., Columbus—W. H. Duffy, dir. Pub. Serv., grading, laying water services and sewer connections, and paving 370 ft. Gates St., 1,174 ft. 18th St., both 24 ft. wide, and 3,453 ft. Hanford St., 36 ft., all asphalt, to Franklin Asphalt Paving Co., 209 South High St., $5,050, $13,911 and $28,245 respectively; 705 ft. alley north of McMillan Ave., 896 ft. alley west of Linwood Ave., both 20 ft., and 1,621 ft. alley west of Indianola Ave., 15 ft, all concrete, to Columbus Contg. Co., 1471 West Broad St., $4,302, $5,324 and $6,843 respectively; 475 ft. 5th St., 20 ft., asphalt, to Federal Paving Co., 996 McAllister Ave., $4,707. Noted Aug. 16.

O., Lisbon—Columbiana Co. resurfacing with bituminous macadam, Dixonville Rd., to Mylar Constr. Co., Youngstown, $34,982. Engrs. est. $35,000.

Mich., Detroit—Grading and paving with sheet asphalt to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Puritan Ave., $155,773; to F. Porath, Jr., 305 Free Press Bldg., Ferdinand Ave., $22,357; to Cooke Asphalt Paving Co., 1260 Penobscot Bldg., Parkhurst Ave., $20,931; to Detroit Asphalt Paving Co., 20 McGraw Bldg., Dexter Ave., $27,682, Greenlawn Ave., $26,054, Parkside Ave., $49,032, Thatcher Ave., $25,910, Webb Ave., $25,861, Washburn Ave., $23,430, Warren Ave., West $89,297, Warren Ave., East $54,818, Granville Pl., $6,172, Wilshire Ave., $29,051, Fairfield Ave., $32,290, Green Ave., $14,554, Holmur Ave., $22,230, Lakeview Ave., $31,233, Lakewood Ave., $34,189, Pitt St., $12,512, Post St., $53,587, Shoemaker Ave., $9,419, Webb Ave., $28,424.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving **0.89 mi. 11-9-C-1 Madison means (0.89 mi. Route 11, Federal Aid Project 9, Sect. C-1, Madison Co.)**, to W. C. Johnson, 512 South High St., Belleville, 0.89 mi. 11-9-C-1, 0.84 mi. 11-9-38 and 0.23 mi. 11-9-39X, Madison, $22,102, $38,499 and $6,968 respectively; to E. J. Eiff, Quincy, 2.96 mi. 31-31-8 Brown, $58,708; **4.08 mi. 3-55-Greene means (4.08 mi. Route 3, Sect. 55, Greene)**, to Nelson Bros., Jerseyville, 4.08 mi. 3-55 Greene and 4.35 mi. 3-58 Jersey, $92,367 and $90,983 respectively; to J. W. Jones, Benton, 2.71 mi. 14-6 and 4.43 mi. 14-6X Franklin, $61,680 and $98,400 respectively; to Trommeter & Sons, Peru, 3.75 mi. 18-15 Kendall De Kalb, $80,185; to List & Gifford Constr. Co., 415 Railway Exch., Kansas City, Mo., 5.08 mi. 31-11 Schuyler, $117,206; grading to Keating Bros., Auburn, 53,590 cu.yd. 1-2A and 37,140 cu.yd. 1-3A White, $28,663 and $16,516 respectively; to D. C. Condon, 301 Karbach Bldg., Omaha, Neb., 132,361 cu.yd. 3-59A Jersey-Madison and 41,790 cu.yd. 3-60A Madison, $78,510 and $21,487 respectively; to J. W. Jones, Benton, 42,760 cu.yd. 14-6A Franklin, $26,467. Noted Aug. 9.

Wis., Madison — For 1 course concrete paving East Johnson St., to N. Quinn, 515 West Johnson. Engrs. est. $30,000.

Ia., Waterloo—Black Hawk Co., to **J. A. Runkel**, Webster City, grading Primary Rd. Project 302, 91,379 cu.yd. excav., $0.275 and 80,000 cu.yd. channel change, $0.375.

Minn., Le Sueur Center—Le Sueur Co., Job 2302B, State Rd. 14, 79,401 cu.yd. earth, 842 cu.yd. loose rock and 1,488 cu.yd. solid rock excav., etc., to J. Sampson, Faribault, $26,332. Noted Aug. 9.

Kan., Arkansas City—Paving with vitrified brick on concrete, grading, curbing, etc., 14 blocks F Street, Madison and Tyler Aves., 24 ft., to Stanton & Wallace, Arkansas City. Engrs. est. $60,000.

Kan., Eldorado—Paving 8 blocks various streets, 10,212 sq.yd. 6 in. rein.-con., 6,352 ft. 6 in. curb and gutter, 4,250 cu.yd. earth excav., etc., to Stewart Ritchie Constr. Co., Wichita, $34,210. Engrs. est. $40,000.

Kan., Minneapolis—Ottawa Co. concrete paving 0.74 mi. Salina-Bennington Road, Federal Aid Project 157, to L. W. Reprood, Lincoln, Neb., $42,937.

N. D., Mandan—Paving ½ mi. Mandan-Bismarck Highway, bitulithic, to Haggart Constr Co, Fargo, $28,000. Noted Aug. 2.

N. D., Valley City—Paving 21,000 sq.yd. Dists. 1 and 2, bitulithic, to Haggart Constr. Co., Fargo, $100,000.

Ark., Little Rock—Grading, curbing and concrete paving 11,500 sq.yd. in Imp. Dist. 343, to Gregory and Wilson, Little Rock, $31,050.

Tex., Dallas—Paving St. Paul St. from Commerce to Marillo Sts., uvalde rock asphalt on concrete, to Uvalde Paving Co., Insurance Bldg., at $3.18 per sq.yd. Est. cost to exceed $50,000.

Tex., Eastland—Eastland Co. paving with bituminous on macadam 19.14 mi. Eastland Gorman Rd., 10.04 mi. road from Eastland Co. line north, 18.69 mi. Cisco-Rising Star Rd., all 18 ft., to Chapin & Kemp, San Antonio, $314,994.

Tex., Ft. Worth—Curbing, guttering and paving with 2 in. warrenite bitulithic Lee Ave. from Colwyn to Camp Bowie Sts., to West Texas Constr. Co., Cotton Exch. Bldg., $64,792. Engrs. est. $65,000.

Tex., Vernon — Wilbarger Co., concrete surfacing 2.24 mi. Vernon-Oklaunion Rd., Highway 5, 18 ft., to J. P. Foty, Vernon, $69,639, engrs. est. $80,000; 0.64 mi. Pease River Rd. to B. O. Gilstrap, Iowa Park, $15,838, $26,000. Noted Aug. 16.

Okla., Tulsa—Vibrolithic paving Trenton Ave. and 17th St., to Western Constr. Co., Tulsa, $44,391 and $75,465 respectively.

Okla., Weleetka — Improving Seminole Ave., to Wilson & Bush, Weleetka, 6,100 sq.yd. concrete at $2.40 per sq.yd., 2,100 cu.yd. earth excav. at $0.85, 3,150 lin.ft. curbing $0.83, etc., total $22,645. Noted July 19.

Utah—State Rd. Dept., Salt Lake City, grading and surfacing 1.77 mi. Main Street of Nephi City, Federal Aid Project 53, Juab Co., to Wasatch Grading Co., Provo, 2,174 cu.yd. common excav. at $0.95 per cu.yd., 1,550 cu.yd. borrow $0.50, 16,780 sq.yd. Type K concrete $1.26, 1,940 sq.yd. Type G concrete $1.26, etc., total $60,845; 7,077 mi. Scipio-Juab Rd., Federal Aid Project 17 A, Millard Co., to Hawley, Anderson & Hinckley, 323 North 1st St. W., Salt Lake City, 9,625 cu.yd. common excav. $0.50, 4,375 cu.yd. borrow $0.50, 14,322 cu.yd. loading gravel $1, 31,244 yd. hauling gravel $0.40, 7,077 mi. placing gravel $500, etc., $48,288. Noted Aug. 9.

Nevada—State Hy. Dept., Carson City, grading, gravel surfacing and building culverts on Caliente-Pioche Rd., Federal Aid Project 85, Contr. 84, Lincoln Co., to F. A. Dahle Constr. Co., 144 East 3rd St., North, Logan, Utah, $269,845; timber truss on timber bents over Meadow Valley Wash near Caliente, Contr. 83, Lincoln Co., to Security Bridge Co., Ogden, Utah, $7,244.

Wash., Kelso — To United Contg. Co., North West Bank Bldg., Portland, Ore., paving with 2 in. warrenite on 4 in. crushed rock, 6,851 sq.yd. Dist. 50, $18,942; 6,100 sq.yd. Dist. 49, $18,142; 1,589 sq.yd. Dist. 51, $4,030.

Calif., Fresno—Fresno Co. to Blanco & Taylor, Los Banos, 4.25 mi. recrowning and spreading 3 in. rock and 5. 75 mi. widening, recrowning and spreading 3 in. rock, 16 ft. wide, on Trimmer Rd., 10,000 cu.yd. earthwork at $1.40 per cu.yd., 10,000 tons rock $2.80, total $42,000; to Thompson Bros., G and Divisadero Sts., spreading 12,000 tons rock, 4 in. thick on 8.75 mi. Tollhouse Rd., at $2.98 per ton, total $35,760; to California Constr. Co., 58 2nd St., San Francisco, grading and paving 4 mi. Route 16, Sect. B, 6,116 cu.yd. earthwork at $1.10 per cu.yd., 334,940 sq.ft. 5 in. asphalt $0.197; to T. A. Hanrahan, Brix Bldg., grading and paving 6.7 mi. Route 2, Sect. A, 15,107 cu.yd. earthwork $0.65, 547,689 sq.ft. 4 in. asphalt $0.174, 4.4 mi. Route 5, Sect. B, 9,685 cu.yd. earthwork $1.20, 380,618 sq.ft. 4 in. asphalt $0.18, 2 mi. Route 27, Sect. A and 0.62 mi. Route 28, Sect. A, 3,857 cu.yd. earthwork $1.50, 219,692 sq.ft. 5 in. asphaltic concrete $0.215. Noted Aug. 30.

Calif., Grass Valley—Improving various streets, to Healy-Tibbitts Constr. Co., 64 Pine St., San Francisco, 232,936 sq.ft. 4 in. concrete at $0.179 per sq.ft., 117,450 sq.ft. 5 in. concrete $0.224, 4,295 cu.yd. grading $1.30, etc. Noted Feb. 22.

Calif., Hermosa Beach—Curbing, guttering and sidewalks on Summitt Ave., to G. H. Oswald, 366 East 58th St., Los Angeles, $117,000.

Calif., Los Angeles—Improving Vine St. between Yucca and Camerford Sts., to G. A. Constantine, Haas Bldg., total for grading $20,800, 18,000 sq.ft. asphaltic concrete at $0.32 per sq.ft., 560,133 ft. 6 in. concrete $0.236, 12,086 ft. bituminous base $0.10, 10,431 ft. curb $0.635, 55,567 ft. walks $0.20, etc., total $300,000.

Calif., Pacific Grove—To Clark & Henery Constr. Co., 38 South Sutter St., Stockton, grading, concrete curbing, guttering and paving with 1½ in. warrenite bitulithic on 3½ in. asphaltic concrete, Lighthouse Ave. between 19th St. and city limits, $86,672; Forest Ave. between Lighthouse and Sinex Aves., $23,640.

Calif., San Francisco—Curbing, sidewalks and paving Liberty St. between Church and Noe Sts., and Sanchez St. between 20th and 21st Sts., to Municipal Constr. Co., 112 Lyon St., $23,443. Noted Aug. 30.

Calif., Santa Monica—Paving with 1½ in. warrenite bitulithic on 3½ in asphaltic concrete 4th St. between Pico and Central Aves., to J. D. Keen Paving Co., Dudley Block, $28,500.

Calif., Vacaville—Asphaltic concrete paving portions West and Market Sts., etc., to California Constr. Co., 58 2nd St., San Francisco, $67,000.

Que., Montreal — To Sicily Asphaltum Paving Co., 60 St. Viateur St., asphalt pavements on Bordeaux St., $20,953, Lasalle St., $7,698, Lajeunesse St., $17,180, Lalonde St., $5,288; to B. Brault Ltd., 2855 Rosemount Blvd., Gouin Blvd., $97,287; to Rondou Corlier & Co., 3506 Christophe Columb St., Berri St., $27,554. Noted Aug. 30.

Ont., Walkerville—Concrete pavements to Merlo, Merlo & Ray, Ford, $68,000.

Industrial Works

PROPOSED WORK

N. Y., Buffalo — Albany Garage, 409 Niagara St., plans to rebuild 2 story, 60 x 80 ft. garage, recently destroyed by fire. $56,000.

N. Y., Buffalo—Becker-Hoffman Service Co., 250 Franklin St., plans 3 story, 52 x 115 ft. garage, rein.-con., brick and steel, Elmwood Ave. To exceed $75,000.

N. Y., Medina—J. C. Posson and C. W. Grinnell plan to rebuild cold storage plant, Park Ave., recently destroyed by fire. $50,000.

N. Y., New York—A. Herz Co., 9 Barrow St., plans rein.-con., brick and steel plant, plain foundation, Walnut Ave. and 134th St. $100,000. Engineer and architect not selected.

N. Y., Rochester—Paige Sales Co., Cortlandt St., plans 2 story, 60 x 100 ft., concrete and steel garage, Cortlandt St.

N. J., Jersey City—Continental Can Co., 61 Bway, New York City, having plans prepared by Francisco & Jacobus, archts. and engrs., 511 5th Ave., New York City, brick, steel and rein.-con. factory addition, 16th St., here. $500,000.

Md., Baltimore—Paper Products Co., 2405 West Franklin St., plans plant to replace one recently destroyed by fire. $350,000.

Industrial Works (Continued)

W. Va., Huntington—Sterling Oil Products Co., plans warehouse and storage tanks, 31st St. $150,000. G. C. Barnes, mgr.

N. C., Cullowhee—Bd. Trustees of Cullowhee Normal and Industrial School plans enlarging power plant. $40,000. H. A. Underwood, 916 Commercial Bank Bldg., Raleigh, engr.

Fla., Lakeworth—Plans to issue $65,000 bonds extending electric light and water works plants and buildings. A. Drake, Mayor.

Ky., Louisville—Louisville Gas & Electric Co., 311 West Chestnut St., plans extensions and improvements to steam power plant on river front, increasing capacity to 120,000 hp. $500,000. L. F. Strang, c/o owner, engr.

Ky., Russell—Chesapeake & Ohio R.R., Hickox Bldg., Cleveland, O., plans engine house, here. $100,000. C. W. Johns, Richmond, Va., ch. engr.

O., Cleveland—Nickel Plate Storage Co., Room 615, 1900 Euclid Bldg., having preliminary plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 6 story and basement, 60 x 140 ft. warehouse, brick and rein.-con., East 152nd St. and along tracks of Nickel Plate Ry. $160,000. J. Reineck, pres.

O., Hamilton—Having plans prepared by Froelich & Emory Eng. Co., 412 2nd Natl. Bank Bldg., Toledo, large electric light plant. $650,000. W. F. Mason, dir. pub. serv.

Mich., Iron Mountain—Ford Motor Co., Highland Park (Detroit P. O.), had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 5 story, 100 ft. high, 112 x 140 ft. rein.-con., brick and steel power house, plain foundation.

Ill., Chicago—N. A. and S. E. Mittleman, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., plan 1 story 75 x 110 ft. auto sales and service, 2482-86 Milwaukee Ave. $100,000.

Ill., Decatur—Polar Wave Ice & Fuel Co., 3626 Olive St., St. Louis, Mo., having preliminary plans prepared by H. G. Clymer, Wainwright Bldg., St. Louis, Mo., 2 story and basement, 100 x 200 ft. ice manufacturing and refrigeration plant, rein.-con. and brick, along tracks of Wabash Ry., here. To exceed $150,000.

Wis., Knellsville (Belgium, P. O.)—Farmers Cooperative Dairy Co., c/o J. Schmit, having plans prepared 2 story, 36 x 76 ft., brick and concrete factory, plain foundation. $40,000. Private plans.

Wis., Sheboygan—Wisconsin Pub. Serv. Co., c/o J. P. Pulliam, 559 Marshall St., Milwaukee, plans gas plant, 1,300,000 cu.ft. capacity gas storage tank, steel, 138 ft. high, brick and concrete boiler house with brick or concrete stack, brick and concrete pumping plant, etc., here. $1,000,000. R. B. Brown, 182 Wisconsin St., Milwaukee, engr.

Kan., Topeka—Jordan Baking Co. soon takes bids 2 story and basement bakery, brick and concrete, plain foundation, 5th St. $100,000 or more. Private plans.

Mo., Kansas City — A. F. Seested, c/o Kansas City Star, 1715 Grand Ave., having plans prepared by J. G. Brecklein, Federal Reserve Bank Bldg., 3 story and basement, 64 x246 ft. rein.-con. and brick garage and sales room. $100,000. Oakland Motor Car Co., lessee.

Mo., St. Louis—E. T. McGrath, c/o Holbrook-Blackwelder Real Estate Trust Co., 812 Chestnut St., plans 3 story, 89 x 110 ft., rein.-con. and brick garage, plain foundation, Bway., near Poplar St. $50,000. Engineer and architect not selected.

Tex., Carrollton — Northern Texas Gin Co., plans to rebuild cotton gin, recently destroyed by fire. $40,000-$50,000.

Tex., Dallas — Dallas Brass Mfg. Co., 4015 Main St., plans rebuilding brick factory recently destroyed by fire. $40,000. Engineer and architect not announced.

Tex., Dallas — M. Weiss, 1226 North Bishop St., plans factory, Love Field. $50,-000-$60,000. Engineer and architect not announced.

Tex., Ft. Worth—City plans 3 or 4 story garage. $150,000. D. L. Lewis, city engr.

Tex., Houston—Texas Packing Co., 110 Milam St., had plans prepared by M. P. Burt, Falls Bldg., Memphis, Tenn., 3 story and basement, 56 x 116 ft., packing house, brick, Ship Cannel. $80,000.

SUBWAY—PHILADELPHIA, PA.

Following are lowest three bids opened July 24, by Dept. City Transit, for subway and stations in Arch St. from east of 9th St. to west of 12th St., Cont. 207, (A) E. Paseuzzi, A. Jafolla and L. Mark, 601 Lincoln Bldg.; (B) Keystone State Constr. Co., 210 South 13th St. (awarded contract); (C) F. J. Boas & Ryan Constr. Co., 201 North Broad St. The unit bids were as follows:

	A	B	C
70,000 cu.yd. excavation above elevation, 6.00	$8.25	$9.10	$8.25
100 cu.yd. excavation below elevation, 6.00	14.00	12.00	11.00
100 M. ft. B.M. yellow pine lumber	72.00	60.00	75.00
Underpinning buildings:			
(A) Reading terminal (lump sum)	41,000.00	50,000.00	65,000.00
1,960 ft. of front (B) buildings, 5 stories or less in height	77.70	52.00	75.00
188 ft. of front (C) buildings, over 5 and less than 10 stories in height	108.00	100.00	120.00
30 ft. of front (D) buildings, 10 stories or over in height	198.00	200.00	200.00
200 cu.yd. (E) additional masonry for underpinning	20.00	25.00	30.00
Concrete masonry:			
50 cu.yd. class 1:1½:3	19.85	20.00	25.00
10,000 cu.yd. class 1:2:4	15.75	16.00	18.00
500 cu.yd. class 1:3:6	16.00	12.00	15.00
100 cu.yd. class 1:4:8	14.00	10.00	12.00
1,000 sq.ft. reinforced concrete sheathing	.90	1.00	1.00
50 cu.yd. brick masonry	29.00	30.00	30.00
50 cu.yd. hollow terra-cotta brick masonry	30.00	30.00	30.00
50 cu.yd. rubble masonry	10.00	6.00	10.00
10 sq.yd. vitrified shale brick sewer lining	3.75	4.00	4.00
10 sq.yd. granite block sewer lining	5.00	6.00	6.00
15 manholes	150.00	100.00	100.00
60 verticle ft. wellholes	15.00	15.00	15.00
Building new inlets:			
No. 1 inlet	190.00	200.00	200.00
No. 2 inlet	165.00	175.00	175.00
No. 3 inlet	160.00	150.00	150.00
No. 4 inlet	150.00	100.00	100.00
Taking out and rebuilding inlets:			
21 inlets having standard pattern casting	175.00	80.00	100.00
1 inlet having old pattern casting to be replaced by standard pattern casting	185.00	80.00	100.00
Flagstones:			
100 sq.ft. 2-in. thickness	.60	.60	.75
100 sq.ft. 4-in. thickness	2.00	.75	1.00
100 sq.ft. 6-in. thickness	3.00	3.00	3.00
100 cu.yd. dry rubble masonry or rip-rap	4.50	4.00	4.00
100 cu.yd. broken stone or pebbles for drains	2.75	3.00	2.75
1,000 bags cement grout	1.25	1.50	1.35
1,000 sq.yd. granolithic finish	1.14	1.25	1.30
Fabric waterproofing:			
100 sq.yd. 1-ply	.95	1.00	1.00
100 sq.yd. 2-ply	1.30	1.40	1.50
100 sq.yd. 3-ply	2.10	2.00	2.00
100 sq.yd. 4-ply	3.06	3.00	3.00
100 sq.yd. 1-ply dry roofing felt	.40	.50	.50
8,000 sq.yd. asphaltic mastic water-proofing	3.00	3.00	3.00
100 cu.yd. brick in water-proofing compound	48.00	50.00	45.00
Vitrified clay pipe:			
1,000 lin.ft. 4-in.	.45	.50	.50
1,000 lin.ft. 5- or 6-in.	.65	.70	.65
500 lin.ft. 8- or 10-in.	.75	.80	1.00
500 lin.ft. 12-in.	1.15	1.25	1.25
1,500 lin.ft. 15-in.	1.95	2.00	2.00
100-lin.ft. 18-in.	3.50	4.00	3.50
Extra heavy cast-iron soil pipe:			
400 lin.ft. 3-in.	.68	.70	.75
500 lin.ft. 4-in.	1.04	1.00	1.00
1,000 lin.ft. 5-in.	1.40	1.50	1.50
4,000 lin.ft. 6-in.	1.70	1.75	1.75
100 lin.ft. 8-in.	2.75	2.50	2.50
Cast-iron pipe furnished:			
50 net tons bell and spigot straight	75.00	80.00	75.00
10 net tons bell and spigot specials	160.00	170.00	175.00
10 net tons flange high-pressure straight	120.00	125.00	125.00
5 net tons flange high-pressure specials	175.00	200.00	175.00
5 net tons flange high-pressure cast-steel specials furnished	285.00	300.00	250.00
Laying or removing cast-iron pipe:			
100 net tons bell and spigot pipe and specials	20.00	25.00	25.00
50 net tons flange high-pressure pipe and specials	30.00	30.00	30.00
Bell end water gate valves:			
1 30-in. geared gate valve	1,300.00	1,200.00	1,000.00
1 24-in. gate valve	450.00	400.00	500.00
1 20-in. gate valve	325.00	300.00	300.00
1 16-in. gate valve	210.00	200.00	200.00
1 12-in. gate valve	135.00	120.00	150.00
1 10-in. gate valve	110.00	100.00	100.00
1 8-in. gate valve	100.00	100.00	75.00
1 6-in. gate valve	75.00	70.00	50.00
2,000 lb. wrought-iron or steel pipe, any size	.12	.10	.10
Wrought-iron or steel pipe conduit:			
6,000 lin.ft. ¾- or 1-in. galvanized conduit	.19	.20	.25
1,000 lin.ft. 1¼- or 1½-in. galvanized conduit	.34	.30	.35
1,000 lin.ft. 2½-in. galvanized conduit	.65	.60	.50
500 lin.ft. 3-in. galvanized conduit	.76	.70	.75
500 lin.ft. 3½-in. galvanized conduit	.92	.90	1.00
Galvanized outlet and pull boxes:			
700 outlet boxes	1.50	1.00	1.00
60 pull boxes	6.00	2.00	3.00
Temporary lighting system (lump sum)	4,650.00	5,000.00	3,500.00
5 10-in. grate iron bell trap cesspools	25.00	5.00	25.00
10,000 lb. miscellaneous iron castings	.11	.10	.10
10,000 duct ft. terra-cotta ducts	.14	.15	.15
25,000 lb. structural steel of any class	.10	.08	.08
2,250,000 lb. cleaning, hauling and erecting old structural steel	.025	.03	.03
50 net tons interlocking steel sheet piling	98.00	100.00	100.00
Steel pipe piles:			
100 vertical ft. 12-in.	7.50	8.00	7.50
100 vertical ft. 15-in.	9.60	10.00	8.50
300,000 lb. steel reinforcing rods and bars	.08	.08	.07
1,000 lb. steel wire forms and anchors	.28	.20	.20
2,000 sq.ft. steel ventilation gratings	3.10	3.25	3.00
1,000 sq.ft. painting steel work	.09	.10	.07
100 sq.ft. safety treads	3.00	3.00	2.50
1,000 sq.ft. vault lights	3.00	3.00	3.00
100 sq.yd. cartway paving, granite block on gravel base, if ordered additional	4.00	4.00	5.00
Sidewalk repaving:			
100 sq.yd. granolithic	3.00	3.00	3.00
100 sq.yd. brick	2.00	2.00	2.00
100 sq.yd. flagstone	3.00	3.00	3.00

	A	B	C
Curbing:			
100 lin.ft. 6-in. straight granite	3.00	3.00	3.00
100 lin.ft. 8-in. straight granite	4.00	3.25	3.50
100 lin.ft. 6-in. curved granite	4.00	3.50	4.00
100 lin.ft. 8-in. curved granite	5.00	4.00	4.50
100 lin.ft. steel edge concrete	2.00	2.00	2.00
100 lin.ft. resetting curb	.60	.60	.50
Force account ($20,000)	25%	30%	30%
Extended totals	$1,171,729	$1,198,555	$1,271,060

Industrial Works (Continued)

Calif., Long Beach—E. R. Gibson, et al., 325 East 1st St. plans laundry. To exceed $100,000.

Calif., Los Angeles—Los Angeles Gas & Electric Co., 645 South Hill St., plans to issue $4,000,000 bonds improvements and extensions to plant and equipment.

Calif., Los Angeles—Thompson Co., 1420 East 8th St., had plans prepared 1 story, 50 x 125 ft., brick garage, East 8th St. Private plans.

Calif., San Francisco—B. Getz, Chronicle Bldg., had plans prepared by Morrow & Garren, Chronicle Bldg., 1 and 2 story, concrete garage, Ellis and Buchanan Sts. $40,000.

Calif., San Francisco — J. Pasqualetti, Humboldt Bank Bldg., having plans prepared 2 story and basement, rein.-con. garage, Market St. near 15th St. $40,000. Private plans.

Calif., San Francisco — San Francisco Assn. for Blind, Folsom and Langton Sts., having plans prepared by H. H. Meyers, Kohl Bldg., 3 story, rein.-con. factory, 7th and Howard Sts. $60,000.

Calif., Ventura — Ventura Impvt. Assn., c/o A. C. Martin, archt., Higgins Bldg., Los Angeles, having plans prepared 1 story, 75 x 100 ft., brick garage, here.

Que., Drummondville—Southern Canada Power Co. Ltd., 20 St. Nicholas St., Montreal, plans power house, 30,000 hp., at Hemming Falls near here on St. Francis River. J. S. H. Wurtele, c/o owners, engr.

Que., Montreal—J. B. Baillargeon Co., 329 Ontario St. E., plans 8 story, 109 x 155 ft., rein.-con., brick and steel warehouse. $300,000.

BIDS DESIRED

Va., Richmond—D. M. Lea Co., 20th and Main Sts., receiving bids 2 story, 200 x 300 ft., box factory. $250,000. Carneal & Johnston, Chamber of Commerce Bldg., archts.

O., Cleveland — Brush Garage Co., c/o Watson Co., archts., 4614 Prospect Ave., receiving bids 2 story and basement, 110 x 110 ft., brick, steel and concrete garage, Prospect Ave. $75,000.

O., Cleveland — A. C. Wolf and F. M. Griffith, archts., Swetland Bldg., taking bids and open same about Sept. 10, 1 story machine shop and foundry, brick and steel, East 55th St., for Globe Brass & Mfg. Co., 5532 Perkins Ave. $75,000. Noted Aug. 2.

Ill., Chicago — Bosches & Chaet, 1119 South Central Park Ave., receiving bids 1 story, 125 x 125 ft. auto sales and garage, Arthington and Crawford Sts., $60,000. J. H. Klafter, 127 North Dearborn St., archt.

Ill., Chicago — D. S. Klafter, archt., 64 West Randolph St., receiving bids 2 story, 75 x 125 ft., factory, 1312-22 Wicker Park Ave., for Parlor Furniture Co., 1304 North Wood St., $75,000.

Wis., Green Bay — Foeller, Schober & Stephenson, archts., Nicollett Bldg., taking bids 2 story, 38 x 150 ft., rein.-con., brick and steel boiler house, plain foundation, for St. Josephs Orphanage. $50,000.

Wis., Milwaukee—Thoringer & Bruecker, archts., 496 Cramer St. taking bids 1 story and basement, 100 x 110 ft., concrete factory, plain foundation, Holton St., $45,000. Owners name withheld. Noted Aug. 2.

Wis., Sheboygan — E. A. Juul, archt., Security Bldg., taking bids 4 story, 65 x 140 ft., rein.-con., brick and steel factory and boiler room, plain foundation, for Bemis-Riddel Fibre Co., 15th St. and Illinois Ave. $40,000.

Mo., St. Louis—Sept. 10, by O. J. Popp, archt., 320 Odd Fellows Bldg., 92 x 256 ft., rein.-con. and steel plant, plain foundation, Fairview Ave., for Warren Steel & Casting Co., Fairview and Kingshighway. $50,000. Noted June 7.

Calif., Los Angeles—California Warehouse Co., 843 Traction Ave., receiving bids 4 story, 80 x 100 ft. brick warehouse annex. W. J. Saunders, Laughlin Bldg., archt.

Calif., San Francisco—W. W. Hanscom, engr., 848 Clayton St., receiving bids 2 story rein.-con. factory, 19th, Florida and Alabama Sts., for Pelton Water Wheel Co., 19th and Harrison Sts. $100,000. Noted June 7.

CONTRACTS AWARDED

Conn., Hartford — Hartford Empire Co., Homestead Ave., two 1 story, 36 x 50 ft. factory buildings, brick and steel, plain foundation, to Bartlett & Brainard Co., 252 Asylum St. Archts. est. $50,000. Noted Aug. 23.

Conn., Middletown—Wilcox & Crittendon Co., 3 South Main St., 3 story, 60 x 60 ft. factory, brick and steel, plain foundation, South Main St., to C. O. Stone & Sons, Inc., 111 South Main St. Archts. est. $40,000. Noted Aug. 30.

Conn., Oakville—Oakville Pin Co., 2 story, 70 x 120 ft. factory, rein.-con. and brick, plain foundation, to J. W. Ferguson Co., 152 Market St., Paterson, N. J. Archts. est. $40,000.

Conn., Plainville—Standard Steel & Ball Bearing Inc., Woodford Ave., 2 story, 60 x 150 ft. brick and steel factory, plain foundation, to Laurence & Coe., 372 Trumbull St., Hartford. Archts. est. $60,000. Noted June 14.

N. Y., Brooklyn—J. Reuben, c/o S. Millman, archt., 26 Court St., will build 1 story, 125 x 210 ft., rein.-con., brick and steel garage, East New York Ave., by day labor. $50,000.

N. Y., New York—T. J. Keane, c/o J. G. Dunnegan, archt. and engr., 394 East 150th St., will build 2 story, 100 x 100 ft., rein.-con., brick and steel garage, 181st St. and Davidson Ave., by day labor. $50,000.

N. Y., Tottenville—Nassau Smelting & Refining Wks., Ltd., 603 West 29th St., New York City, group of buildings, 1 story, rein.-con., brick and steel, plain foundation, here, to Levering & Garrigues, 552 West 29th St., New York City. Archts. est. $100,000.

N. J., Newark—A. G. Constr. Co., c/o R. Botelli, archt. and engr., 207 Market St., will build 2 story, 75 x 300 ft., brick, steel and concrete garage, Broad St. near State St., by day labor. $60,000. A. Gennet, pres.

Fla., Jacksonville—Constructing extension to electric generating station, Talleyrand Ave. and sub-station at nEterprise St. to Gerbich & Haugard, $51,302 and $3,980 respectively; Riverside sub-station, to W. T. Hadlow, Baldwin Bldg., $14,744.

Ill., Chicago—C. Botis, 105 West Monroe St., 1 story, 99 x 174 ft. garage, 425-33 East Pershing Rd., to R. I. Wood, 12 West Garfield Blvd., $40,000.

Ill., Chicago—T. Kahl, 5 North Wabash Ave., 1 story, 170 x 297 ft., garage, 6160-6220 South Wabash Ave., to Johnson, Anderson Co., 7120 Evans Ave. Archts. est. $150,000.

Ill., Chicago—G. L. Lehle, archt., 3811 Bway., remodeling warehouse, to Krahl Constr. Co., 350 North Clark St., $150,000. Owner's name withheld.

Ill., Decatur—Wabash Ry. Co., Railway Exch., St. Louis, Mo., brick and rein.-con. car repair shop, here, to T. B. Smith, 650 Gushard Bldg. Archts. est. $175,000.

Wis., Cobb—Cobb Canning Co., 3 story and basement, 40 x 100 ft. factory, 2 story, 60 x 110 ft. warehouse, 1 story, 40 x 42 ft. boiler house, 1 story 40 x 44 ft. cook room, brick and timber, plain foundation, to H. J. Selmer Co., McCartney Natl. Bank Bldg., Green Bay. Archts. est. $100,000.

Wis., Milwaukee—W. Hyink & Sons Co., 737 North Water St., 1 story, 60 x 100 ft., brick and concrete machine shop, plain foundation, Ogden Ave., to P. Nagtegaal, 2418 Cold Spring Ave. Archts. est. $40,000.

Wis., Waupun—Bear Brand Hosiery Co., 1 story, brick and timber factory addition, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Archts. est. $40,000.

Mo., Trenton — McVey Motor Co., will build 1 and 2 story, 90 x 145 ft. concrete and brick garage, 9th St., by day labor. $50,000. R. H. Sonneman, Kansas City, archt.

Ark., Brinkley—W. E. Brown, 1 and 2 story, 60 x 80 ft., brick, stone and concrete garage and commercial building, to E. W. Dalch, Brinkley. Archts. est. $45,000. Noted Aug. 9.

Calif., Fairfield—Thelen Meat Products Co., hollow tile packing plant, to J. W. Lattin, 4223 San Bonita St., Sacramento. $70,000.

Calif., Los Angeles—Los Angeles Railway Co., Railway Bldg., 1 story, 150 x 150 ft., brick garage, 16th St., to Austin Co., Bartlett Bldg., $40,000.

Calif., Los Angeles — J. Morrell, 823 Traction St., 2 and 3 story, 80 x 160 ft. packing plant, to Winter Constr. Co., 2141 Sacramento St. Archts. est. $150,000. Noted Aug. 30.

Buildings

PROPOSED WORK

Conn., Norwich—Office, etc.—M. Klingon, Colchester, having plans prepared by L. H. Godard, 86 State St., New London, 3½ story, 60 x 120 ft., brick and steel, plain foundation, Bway. $150,000.

Conn., Winsted—Bank—Winsted Savings Bank, 690 Main St., plans brick, stone and steel, plain foundation, Main St. $150,000. Engineer and architect not selected.

N. Y., Amsterdam — High School — Bd. Educ. rejected bids 2 story, 129 x 210 ft., brick, steel and concrete. G. L. Lockwood, 1353 University Ave., St. Paul, Minn., archt. Noted Aug. 2.

N. Y., Binghamton — High School — Bd. Educ. plans 2 story high school. $425,000.

N. Y., Buffalo — Medical Arts — W. W. Cohn (Agent), 155 Pearl St., plans 2 story, 100 x 150 ft. medical arts building, North St. $250,000. Owner's name withheld.

N. Y., Harrison—School—Bd. Educ., having preliminary plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, brick, steel and stone, plain foundation. $300,000.

N. Y., Haverstraw—Club—B.P.O.E. having preliminary plans prepared by Tooker & Marst, archts. and engrs., 101 Park Ave., New York City, 2 story, brick, steel and stone, plain foundation. $150,000.

N. Y., New York—Apartment—C. Kreymborg, archt. and engr., 2534 Marion Ave., preparing plans 9 story, brick, steel and stone, East 38th St., $400,000. Owner's name withheld.

N. Y., New York—Clubhouse—Knights of Columbus, 244 West 51st St., had plans prepared by E. F. Fanning, archt. and engr., 522 5th Ave., 12 story, brick, steel and stone, 8th Ave., $1,650,000. Noted July 5.

N. Y., Oneida—Hotel and Theater—Madison House Hotel Corp., 136 Madison St., plans 5 story, hotel and theatre. $250,000. J. H. Cassidy, 111 West Kennedy St., J. H. Ryan and P. J. Fitzpatrick, all of Syracuse, incorporators.

N. Y., Solvay (Syracuse, P. O.)—High School—Bd. Educ. having tentative plans prepared by M. L. King, Snow Bldg., Syracuse, new high school, Hazzard and Gertrude Sts. Cost between $500,000 and $700,000. Noted March 8.

N. J., Asbury Park — Hotels — Bradley Hotels System, Inc., c/o Jordan Green, archt. and engr., 31 Clinton St., Newark, having plans prepared 3 brick, steel and stone, plain foundations, Beach front, here. $10,000,000.

N. J., Newark—Hospital—Beth Israel Hospital, c/o F. Grad, archt. and engr., 245 Springfield Ave., having plans prepared brick, steel and stone hospital, $1,200,000.

Pa., Johnstown — Mercantile — Snook Hardware Co., 219 Franklin St., plans 3 story and basement, 110 x 130 ft., Vine St. $150,000. Engineer and architect not selected.

Pa., Sharon—Hotel—See "Miscellaneous."

Pa., Warren — High School — Plans new high school. $350,000.

Pa., Williamsport—Hospital—Williamsport Hospital, 798 Louisa St., plans 3 story and basement, 200 x 300 ft., brick, steel and stone addition, Campbell and Louisa Sts. $400,000. Architect and engineer not selected.

W. Va., Charleston—High School—Bd. Educ., takes bids about Nov. 1, 3 story, brick, Washington St. $600,000. H. R. Warne, Masonic Temple Bldg., archt.

N. C., Raleigh—Church—St. Saviours Episcopal Church plans church, rectory and parish house, stone, Saunders St. $200,000. G. M. Nelson, Raleigh, archt. W. B. Snow, Raleigh, chn. Building Com.

Fla., St. Petersburg—Club—Pass-a Grille Fishing Club, having plans prepared by W. Carpenter, St. Petersburg, club house. $200,000.

La., Lafayette—Courthouse—Sept. 18, to vote on $265,000 bonds for new 3 story and basement court house.

Buildings (Continued)

La., Monroe—Court House and Jail—Ouachita Parish Police Jury plans to build new court house and jail. $400,000 bonds sold for project.

La., Shreveport—High School and Fire Station, etc.—Oct. 2, to vote on $1,000,000 bonds for municipal improvements incl. high school and fire station.

Tenn., Nashville—High School—Diocese of Nashville, c/o T. S. Byrne, bishop, 2001 West End, having plans prepared by Regen & Weller, Bank of Commerce Bldg., Memphis, 2 story and basement, brick and stone, 20th and West End Sts. $150,000.

O., Cincinnati—Hospital—Bethesda Hospital, Lafayette and Middletown Aves., plans hospital, near Lafayette and Middletown Aves. $600,000. S. Hannaford & Sons, 1024 Dixie Terminal Bldg., archts.

O., Cincinnati—Store—S. S. Kresge Co., Kresge Bldg., had plans prepared 7 story, 41 x 100 ft., rein.-con., plain foundation, 5th St., here. $200,000. Private plans.

O., Cleveland — Apartment — L. Duchon, 3045 Essex Rd., plans 4 or 6 story, brick, steel and concrete, on lot 197 x 212 ft., East 40th St. and Windsor Ave. $350,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Cleveland — Apartment — Kleason Realty Co., c/o J. M. Sanpliner, 10011 Euclid Ave., plans 4 story, brick and steel, Mayfield and Coventry Rds. $200,000. Engineer and architect not selected.

O., Cleveland—Commercial—Private Investment Co., c/o S. Miller of Independent Towel Supply Co., 1822 Central Ave., plans brick, steel and concrete, 1841 Prospect Ave. $200,000. Engineer and architect not selected.

O., Cleveland — Hotel — Marmon Impvt. Co., c/o M. Marmorstein, pres., Ulmer Bldg., having preliminary plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 10 story, brick, steel and concrete, on lot 99 x 200 ft., 2300 Euclid Ave. $1,500,000.

O., Cleveland — Mercantile — The 1600 Prospect Co., c/o J. L. Free, 1004 Prospect Ave., plans 8 story, brick, steel and concrete, on lot 167 x 189 ft., 1600 Prospect Ave. $1,500,000. Engineer and architect not announced.

O., Cleveland — Office — Union Square Realty Co., c/o W. I. Lewis, Citizens Bldg., having plans prepared by H. F. Hughes, Citizens Bldg., altering and building 2 story, 17 x 104 ft., brick, steel and concrete addition, East 9th St. and Euclid Ave. $300,000.

O., Garfield Heights (Bedford P. O.)—Church, etc.—St. Timothy's Roman Catholic Church, c/o F. Fish, archt., Tenbusch Bldg., Cleveland, having plans prepared 2 and 3 story church, school and parish house, brick, steel and concrete, here. $300,000.

O., Toledo—Hotel—Maumee Hotel Co. having plans prepared by A. Hahn, Toledo, 12 story, 60 x 120 ft., hotel, St. Clair and Jefferson Sts. $1,500,000.

Ind., Evansville—Y. W. C. A., 2nd and Vine Sts., plans brick and stone, 2nd and Division Sts. $300,000. J. Stuart, chn.

Mich., Detroit — Apartment — Kohner & Seeler, archts., 405 Kresge Bldg., preparing plans 4 story and basement, 140 x 200 ft. rein.-con., brick and steel, plain foundation, North Woodward Ave. $500,000. Owners name withheld.

Mich., Detroit—Bank and Office—B. C. Wetzel & Co., 2317 Dime Bank Bldg., preparing plans 12 story and basement, 60 x 150 ft., brick, steel and stone, plain foundation. $700,000. Owner's name withheld.

Mich., Detroit—Hotel—Tuller Hotel, Park and Adams Aves., had plans prepared 14 story and basement, 60 x 100 ft. rein.-con., brick, steel and stone, plain foundation, Bagley Ave. W. H. Adams, 32 Campau Bldg, engr.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Verner, Wilhelm & Molby, 602 Book Bldg., 3 story and basement, 110 x 355 ft., rein.-con., brick and steel, plain foundation, Charlevoix and Fairview Aves. $900,000.

Mich., Detroit — Terminal — A. Lerner, 5710 St. Antoine St., having plans prepared by L. Kamper, Kamper Bldg., 4 story, 70 x 300 ft., rein.-con. and brick warehouse, plain foundation, Piquette Ave.

Ill., Chicago—Apartment—Silverman & Herman c/o Dubin & Eisenberg, archts., 14 West Washington St., plans 3 story and basement, 298 x 307 ft. apartment, Woodlawn Ave. near Hyde Park Blvd., $750,000.

Wis., Elcho—Infirmary—G. Meyer, c/o Globe Hotel, 221 Wisconsin St., Milwaukee, plans 3 story and basement, brick and concrete, plain foundation, Lake Elcho, here. $150,000. Engineer and architect not selected.

Wis., Madison — Academy — Dominican Sisters of Sacred Heart Academy, 2209 Monroe St., having plans prepared by A. Kelsey, Perry Bldg., Phila., Pa., 4 story, rein.-con., steel, brick and stone, plain foundation. $150,000.

Wis., Madison—Business—W. J. Taylor, 456 West Doty St., plans 3 story, 150 x 200 ft., rein.-con., brick and steel, plain foundation. $150,000. Engineers and architect not selected.

Wis., Madison—Hospital—Bd. Health, c/o K. Corscott, 119 East Washington Ave., having plans prepared by Claude & Starck, Badger Annex, 2 story and basement, 100 x 200 ft., rein.-con., brick and steel, plain foundation. $150,000. Noted Aug. 9.

Wis., New London — High School — Bd. Educ. c/o D. Newberry, supt., plans 2 or 3 story, brick, tile and concrete, plain foundation. $225,000. Smith, Reynolds & Brandt, Dempsey Bldg., Manitowac, engrs. Noted July 31.

Wis., Waukesha—Hotel—M. Tullgren & Sons Co., archts., 425 East Water St., Milwaukee, soon takes bids 3 story and basement, brick, tile and concrete, plain foundation, here, for F. J. Strong, 151 South East Ave., $400,000.

Wyo., Laramie — Depot — Union Pacific System, 58 East Washington St., Chicago, plans 1 story, 34 x 195 ft., brick, 1st St. between Garfield and Park Sts., here, $160,000. R. L. Huntley, 15th and Dodge Sts., Omaha, Neb., ch. engr.

Mo., Joplin — Office and Store — G. F. Quimbly, 104 Byers Ave., plans 6-8 story, rein.-con. and brick, plain foundation, Main St. $150,000. Engineer and architect not selected.

Mo., St. Louis—Store and Office—Wedemeyer & Nelson, archts., Wainwright Bldg., rejected bids Aug. 15, 3 story and basement, 88 x 175 ft., Grand Blvd., for E. Freund, 2735 Cherokee St. $150,000. Noted Aug. 2.

Mo., St. Louis—Theatre and Office—Local Syndicate, c/o H. Tuchschmidt, archt., Rialto Theatre Bldg., having preliminary plans prepared 4 story, 90 x 150 ft., Grand Blvd., $250,000.

Ark., Blytheville—Hotel and Store—L. L. Vandervoort, Paragould, having preliminary plans prepared 8 or 10 story, rein.-con. and brick, concrete pile foundation. $250,000. Private plans.

Tex., Dallas—Bank and Office—Republic Natl. Bank, plans 18 story and basement, 97 x 100 ft., brick, concrete and steel, Main and Exchange Sts. $500,000. Engineer and architect not announced.

Tex., Ft. Worth—City Hall and Auditorium—City making plans city hall and auditorium, Throckmorton St. To exceed $500,000. Engineer and architect not announced.

Tex., Galveston—Hotel—P. G. Silber & Co., archts., 331 Bedell Bldg., San Antonio, preparing plans 10 story, 110 x 160 ft., rein.-con., brick, steel and terra cotta. $1,000,000. Owners name withheld.

Tex., Texarkana—City Hall—Voted $200,000 bonds for city hall. W. J. Nichols, mayor. Noted July 26.

Okla., Tulsa—Medical Art—C. W. Day, 1302 South Boulder St., soon takes bids 8 story and basement, 50 x 140 ft., rein.-con., brick, stone and terra cotta, 6th and Boulder Sts. $400,000. Endicott & Rush, 101 Lorton Bldg., archts. Noted March 22.

Okla., Tulsa — Store — Vandever Dry Goods Co., 109 South Main St., having plans prepared by Atkinson & Olston, 816 Mayo Bldg., 5 story and basement, 60 x 135 ft., rein.-con., brick and stone, 16 East 5th St. $250,000. W. W. Huff, Mutual Bldg., Kansas City, Mo., structural engr.

Calif., Berkeley — Store and Lodge — Knights of Columbus had plans prepared by J. W. Plachek, 2014 Shattuck Ave., 3 story, brick or concrete, Milvia St. and Shattuck Ave. $175,000.

Calif., Long Beach — Apartment — R. A. Butterfield, 919 East 17th St., having plans prepared by Baume & Davies, Farmers and Merchants Bank Bldg., 5 story and basement, brick and steel, Bway. and Magnolia Sts. To exceed $200,000.

Calif., Long Beach — Apartment — Long Beach Realty Co., 253 East 1st St., having plans prepared by Piper, Kahrs & Bobbe, 38 Locust St., 3 story and basement, 50 x 150 ft., brick, Hermosa Ave.

Calif., Los Angeles — Dormitory — Good Shepherd Convent, 1312 Arlington Ave., having plans prepared by A. C. Martin, Higgings Bldg., 4 story and basement, rein.-con. and brick, West Pico St. $150,000.

Calif., Los Angeles—Hotel—N. Talmadge, having plans prepared by Walker & Eisen, Pacific Finance Bldg., 10 story, 130 x 150 ft., brick and steel, Wilshire Blvd. and New Hampshire. $800,000.

Calif., Sacramento—Cathedral—Scottish Rite Cathedral Assn., 28th and L Sts., plans cathedral, block bounded by 28th, 29th, K and L Sts. J. Clauss, pres. C. Weller, archt., Santa Fe Bldg., San Francisco, will probably prepare plans.

Calif., Sacramento — College — Christian Brothers College, c/o Dean & Dean, archts., City Library Bldg., having plans prepared group of 2 story, brick, stucco and tile buildings, 21st and Y Sts. $200,000.

Calif., San Francisco—Theatre and Hotel—Mandarin Theatre Co., c/o A. A. Cantin, archt., 68 Post St., had plans prepared 3 story, fireproof, Kearny St. near Pacific St. $150,000.

Calif., Santa Barbara—Hall—B. P. O. E. plans 2 story and basement, fireproof, $150,000. C. Werner, Santa Fe Bldg., San Francisco, archt.

Que., Montreal—Parish House—Parish of Redemption, Notre Dame St. E., plans 3 story, 25 x 75 ft., rein.-con., brick, steel and stone, Adam St. $150,000.

Que., Montreal — School — Protestant School Bd. Comrs., Belmont St., plans 3 story, 23 x 80 ft., rein.-con., brick, steel and stone on DeBiencourt St. in Cote St. Paul, $250,000, also 2 story, 22 x 25 ft. house for caretaker, $10,000.

BIDS DESIRED

N. Y., New York—Apartment—Cowan & Daley, c/o Sugarman, Hess & Berger archts. and engrs., 16 East 43rd St., will build 9 story, 65 x 100 ft., brick, steel and stone, East 80th St. Work will be done by separate contracts under supervision of architects.

N. J., Clifton—High School—Sept. 14, by Bd. Educ., 4 story, brick, marble and concrete, Main Ave., D. W. Ganly, secy. Lee & Hewitt, 152 Market St., Paterson, archts. and engrs. Noted Aug. 9.

Pa., Johnstown—Hospital—Sept. 15, by W. J. Kuntz, chn. Building Bd., 3 story and basement, 110 x 130 ft., rein.-con., brick and steel, Franklin St. $150,000. W. R. Adams, Nemo Bldg., archt.

Pa., Johnstown — School — Johnstown School Dist., Swank Bldg., taking bids and opens same about Sept. 24, 3 story and basement, 100 x 100 ft. concrete, brick and steel addition, Hudson St. $150,000. J. E. Adams, Nemo Bldg., archt.

Pa., Phila.—Nurses Home—Sept. 10, by H. W. Coster, archt., St. Girard Bldg., 4 story and basement, 36 x 92 ft., rein.-con. brick and steel, plain foundation, for Methodist Episcopal Hospital, Broad and Wolf Sts. $150,000.

Md., Baltimore — Apartments — J. E. Moxley, Jr., archt., Equitable Bldg., will supervise construction of 4 story, 75 x 84 ft., brick, 25th and St. Paul Sts., for N. J. Myerberg, 210 North Calvert St. $150,000. Noted Aug. 23.

W. Va., Huntington—Hospital—Sept. 28, by State Bd. Control, Charleston, 1 story and basement, 58 x 94 ft. recreation building, concrete, brick and tile 3 story and basement, 121 x 163 ft. dormitory, concrete and tile. R. M. Bates, Jr., Cammock Watts Bldg., archt. Noted Mar. 1.

N. C., Asheville—Hotel—E. W. Grove, St. Louis, Mo., receiving bids 90 x 100 ft., brick and tile, here, $600,000. J. W. Geary, Asheville, engr.

Miss., Brook Haven—High School—Bd. Educ. taking bid 125 x 200 ft., brick. $150,000. E. J. Hull, Daniel Bldg., Jackson, archt. Noted March 1.

Miss., Jackson—Office—Sept. 17, Lamar Life Insurance Co., 10 story and basement, 80 x 148 ft., rein.-con., terra cotta, and steel, plain foundation, $500,000. Sanguinet, Staats & Hendrick, First Natl. Bank Bldg., Ft. Worth, Texas, archts. Noted Aug. 23.

Tenn., Memphis—Library—Oct. 1, by E. L. Harrison, archt. and engr., U & P. Bldg., 3 story, Monroe Ave. and Front St., for City. $150,000.

O., Cleveland — Apartment — S. Glaser, Ulmer Bldg., taking bids 2 story and basement, brick, steel and timber, 1900 Ansel Rd. $150,000. L. R. Walker & J. L. Mayer, 1900 Euclid Bldg., archts. Noted June 7.

O., Cleveland—Apartment—J. Nozik, 996 Linn Dr., receiving bids and opens same about Sept. 15, 3 story and basement, 87 x 132 ft., brick and timber, 1924 East 75th St. $200,000. M. Weis, Union Bldg., archt. Noted Aug. 30.

O., Cleveland—Apartments—Ulevitch & Passov, 6300 Linwood Ave., taking bids two 3 story and basement, brick and timber, 1021-25 Linn Dr. $150,000. M. Weis, Union Bldg., archt.

Buildings (Continued)

O., Findlay—High School—Sept. 21, by Bd. Educ., 3 story and basement, 112 x 207 ft., brick, steel and concrete. $350,000. T. D. McLaughlin, and associates, Savings Bldg., Lima, archts.

Wis., Green Bay — Foeller, Schober & Stephenson, archts., Nicollet Bldg., taking bids for excavation 4 story and basement, brick and concrete building, plain foundation, Jefferson and Pine Sts., for Y. M. C. A. Total cost $400,000. A. F. Grim, Minahan Bldg., secy. Noted July 19.

Wis., Haywood — School — Sept. 21, by Chairman Bd. Educ., 3 story and basement, 100 x 140 ft., concrete, rein.-con., brick and steel. $150,000. F. E. Johnson, 31 Wisconsin Block, Superior, archt. and engr.

Wis., Madison—Hotel—Balch & Lippert, archts., Gay Bldg., receiving bids 10 story and basement, 44 x 120 ft., rein.-con., brick and steel, plain foundation, Pinckney St., for Piper Bros. Co., 31 North Pinckney St. $300,000. Noted Dec. 28.

Ia., Davenport—Schools—Sept. 11, at office J. D. McCollister, secy., Bd. Educ., additions to 3 intermediate schools. Temple & Burrows, 208 Main St., archts.

Kan., Iola—High School—Sept. 17, by W. W. Williamson, archt., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 95 x 141 ft., rein.-con., brick and stone, for Bd. Educ. $150,000. Noted July 13.

Kan., Wichita—Club—Oct. 8, by B.P.O.E., c/o H. G. Boyd, 10 Elks Lodge, or E. Forsblom, archt., 305 Sedgwick Bldg., 6 story and basement, 140 x 150 ft., rein.-con., brick and steel, plain foundation, North Market St. $500,000. H. A. Noble Reliance Bldg., Kansas City, Mo., engr. Noted Aug. 30.

Calif., Fullerton—City Hall—Sept. 11, by City Trustees, brick and concrete. $150,-660. W. H. Austin, 1st Natl. Bank Bldg., Long Beach, archt.

Calif., Oakland—Office—C. W. McCall, archt., Central Bank Bldg., receiving bids 5 or 7 story and basement, fireproof, 17th St. near Bway. $200,000 or more. Owner's name withheld.

Calif., Pasadena—Apartment—M. Hunt, archt., Hibernian Bldg., Los Angeles, receiving bids 3 story and basement, concrete and brick, Los Robles Ave., for Stanley Apartments. $150,000.

Calif., Pasadena — Bank and Office — Pacific Southwest Trust & Savings Bank receiving bids 10 story and basement, 105 x 168 ft., rein.-con., Marengo and Colorado Sts. $1,300,000. Curlett & Beelman, 408 Union Bank Bldg., Los Angeles, archts. Noted Apr. 26.

BIDS RECEIVED

Ky., Louisville—Administration—Standard Sanitary & Mfg. Co., 4th and Shipp Sts., 4 story, rein.-con., from L. W. Hancock, Louisville Trust Bldg. Archts. est. $150,000. Noted July 26.

Minn., Willmar — Cottages — State Bd. Control, Capitol, St. Paul, Aug. 28, general contract two 2 story and basement, rein.-con., brick and tile, at State Hospital for Insane, here, from S. M. Klarquist Sons Co., 745 Security Bldg., Minneapolis, $150,-407. Noted Aug. 23.

Calif., Santa Rosa—Lodge—Santa Rosa Lodge of Elks, 3 story, concrete and steel, from R. H. Hildebrand, Santa Rosa, complete $271,919; shell $171,111. Noted Aug. 2.

CONTRACTS AWARDED

N. Y., Brooklyn — Schools — Bd. Educ., 500 Park Ave., New York City, P. S. 196 east side Bushwick Ave. between Meserole and Scholes Sts., here, to Lustbader Constr. Co., 423 Madison Ave., New York City, $1,012,000; Girls Commercial High School, Classon Ave. between Union and President Sts., here, to G. A. Fuller, 175 5th Ave., New York City, $2,492,000. Noted Aug. 23.

N. Y., Buffalo—Cathedral—Buffalo Consistory A.A.S.R., 168 Delaware Ave., cathedral, on Delaware Ave., to Crooker & Carpenter, Inc., Crosby Bldg. To exceed $700,000. Noted Dec. 7.

N. Y., New York—Apartment—K. C. W. Building Co. c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, West Tremont Ave., by day labor. $750,000.

N. Y., New York—Apartment—Sugarman & Berger, archts. and engrs., 16 East 43rd St., 15 story, 76 x 118 ft., brick, steel and stone, Amsterdam Ave. and 73rd St., to J. S. Siegel, 345 Madison Ave. Archts. est. $900,000. Owner's name withheld.

N. Y., New York — Apartment — C. Weinstein, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, 100 x 125 ft., brick, stone and steel, Pinehurst Ave., by day labor. $175,000. Noted Aug. 16.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., general contract P. S. 98 south side West 212th St., 100 ft. westerly from 10th Ave., to T. A. Clarke Co., 122 Livingston St., Brooklyn, $937,700; P. S. 75 easterly side Faile St. north of Whitlock Ave., to P. J. Brennan & Son, 624 Madison Ave., $1,054,000; P. S. 78 easterly side Fish Ave. between Needham and Hicks Sts., to Frymier & Hana Co., Inc., 25 West 45th St., $905,480. Noted Aug. 9.

Md., Crownsville — Dormitory — Crownsville State Hospital, 330 North Charles St., Baltimore, 3 story, 102 x 110 ft., brick, plain foundation, here, to North-Eastern Constr. Co., Lexington Bldg., Baltimore. $200,000. Noted Aug. 23.

Fla., Miami—Bank and Office—Bank of Bay Biscayne, 12th St. and Ave. D, 12 story, foundations to R. C. Miller, Miami; structural steel to Ingalls Iron Wks., 720 Ave. D, Birmingham, Ala. Total cost $1,500,000. Noted Aug. 23.

La., New Orleans—Office—E. Weil, archt., Whitney Central Bldg., 3 story, 186 x 195 ft., rein.-con., brick and steel addition to Maison Blanche Bldg., Iberville and Burgundy Sts., to J. V. and R. T. Burkes, Carondelet Bldg., for Maison Blanche Co., Canal and Dauphine Sts. Archts. est. $283,-535. Noted Aug. 9.

Ky., Princeton—High School—Bd. Educ., 3 story, 80 x 184 ft., to Blackburn, McChesney & Cartwright, Princeton. Archts. est. $150,000. Noted June 21.

O., Akron—Bank and Office—Akron Savings & Loan Co., 12 story, brick, stone and steel, plain foundation, South Main St., to Carmichael Constr. Co., 524 Hamilton Bldg. Archts. est. $600,000. Noted July 5.

O., Cleveland—Bank and Office—United Banking & Savings Co., 2 story, 60 x 110 ft., and 6 story, brick and steel, West 25th St. and Lorain Ave., to Hunkin-Conkey Constr. Co., Century Bldg. Archts. est. $1,000,000. Noted Aug. 30.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 3 story and part basement, 110 x 215 ft., rein.-con., brick and steel, plain foundation, Cameron Ave., to F. N. Cooper, 6370 Gratiot Ave., $546,346. Noted Aug. 30.

Ill., Chicago — High School — Brust & Philipp, archts., 405 Bway., Milwaukee, Wis., 4 story and basement, 220 x 238 ft., brick and concrete, Byron and Lawndale Ave., here, to Barry, Byrne & Ryan Co., 104 South Michigan Ave., for St. Joseph's Convent, 575 Layton Blvd., Milwaukee, Wis. Archts. est. $800,000. Noted May 3.

Wis., Milwaukee—Hospital—Misericordin Hospital, 22nd and Chestnut Sts., 3 story, 47 x 125 ft., brick and concrete, plain foundation, to E. Steigerwald & Sons, 2303 Galena St. Archts. est. $150,000. Noted March 1.

Wis., Union Grove — Employees — State Bd. Control, Madison, 1 story, 50 x 115 ft., rein.-con., brick and stone, plain foundation, at State Home for Feeble Minded, here, to A. C. Kappel, 526 Wisconsin Ave., Racine. Archts. est. $150,000. Noted Aug 2.

Kan., Kansas City — Memorial Rose & Peterson, archts., 434 Brotherhood Bldg., 3 story and basement, 146 x 185 ft., rein.-con., brick, stone and terra cotta to Baer Eng. & Constr. Co., Leavenworth, Kan., for City. $342,454. Noted Aug. 16.

Ark., Brinkley—Church—Southern Presbyterian Church, c/o A. H. Milwer, chn., 2 story and basement, brick veneer, timber and rein.-con., plain foundation, to F. Wagner, Brinkley. Archts. est. $150,000. Noted Aug. 30.

BRIDGE—HAVERHILL, MASS.

Bids were opened June 29 by R. R. Evans, Co. Engr., for rebuilding Haverhill Lower Bridge, (A) H. P. Converse & Co., 191 Devonshire St., Boston, (awarded contract), (B) C. W. Blakeslee & Sons, 58 Waverly St., New Haven, Conn.; (C) T. Stuart & Son Co., 222 Pearl St., Newton. The unit bids were as follows:

	A	B	C
Removing old structure (lump sum)	$22,000 00	$30,000 00	$29,700 00
Preparing foundations (A) North River wall (lump sum)	10,527 00	7,000 00	16,480 00
Preparing foundations (B) all other foundations (lump sum)	202,921 00	190,000 00	185,000 00
Maintaining traffic (lump sum)	11,000 00	5,000 00	7,500 00
6,000 cu.yd. dredging	2 20	5 00	4 90
8,000 cu.yd. earth excavation	3 575	8 00	8 00
50 cu.yd. rock excavation	22 00	20 00	20 00
16,000 lin.ft. wooden piles	0 605	1 25	1 30
520 cu.yd. concrete 1:9	8 00	13 00	12 00
10,200 cu.yd. concrete 1:7½	15 31	19 00	19 50
675 cu.yd. concrete 1:6 underwater	9 54	20 00	19 50
7,200 cu.yd. concrete 1:6 in arches, etc.	24 26	20 00	19 50
20,000 sq.ft. granolithic surface	0 077	0 15	0 10
1,290 lin.ft. balastrade, artificial stone	10 81	15 00	14 00
Towers (piers 4 and 3) (lump sum)	10,663 00	10,000 00	10,000 00
1,150,000 lb. reinforcing bars	0 040	0 06	0 065
84,000 lb. structural shapes, etc.	0 072	0 12	0 10
310 cu.yd. old masonry relaid	11 00	16 00	14 00
308 cu.yd. new granite masonry	88 80	80 00	90 00
3,870 sq.yd. granite block paving	3 96	7 00	7 00
43,500 sq.ft. waterproofing	0 22	0 25	0 25
200 lin.ft. granite curb stones	2 70	3 00	2 90
30 tons cast iron water pipe	143 00	200 00	175 00
Extended totals	$779,833	$890,655	$901,648

SERVICE MAIN—CLEVELAND, OHIO

Following are lowest three bids opened July 20, by Dept. Pub. Utilities, Div. of Water, for furnishing and laying West Side High Service Main, Sect. No. 1, (A) D. Lowensohn, 10803 Fairchild Ave., (awarded contract); (B) J. Connelly Constr. Co., Euclid Bldg.; (C) P. F. Connolly Co., 2029 East 102nd St. The unit bids were as follows:

	A	B	C
11,500 cu.yd. excavating and backfilling	$3 30	$4 00	$3 50
15 M. ft. B.M. lumber and wooden sheeting, left in place	50 00	50 00	75 00
2,390 tons furnishing and laying cast iron, straight, bell and spigot pipe	83 00	78.50	89 00
15 tons furnishing and laying cast iron, flanged and spigot and flanged and bell pipe	165 00	198.00	230.00
36 tons furnishing and laying cast iron, bell and spigot standard fittings	220 00	190.00	220.00
8 tons furnishing and laying cast iron, bell and spigot special fittings	250 00	225.00	220.00
10 tons furnishing and laying cast iron, flanged fittings	280 00	225.00	200 00
237 ft. furnishing and laying 36 in. flanged, riveted steel pipe	34 00	55.00	50 00
Setting one 36-in. gate valve, furnished by city	200 00	200.00	100.00
Setting three 30-in. gate valves, furnished by city	150 00	200.00	100.00
Setting one 20-in. gate valve, furnished by city	125 00	150.00	100.00
20 cu.yd. brick masonry	35 00	30.00	30.00
80 cu.yd. concrete masonry	35 00	30.00	40.00
7,000 lb. steel reinforcement	.10	.10	.10
700 lb. miscellaneous cast iron and wrought iron	.15	.15	.10
300 ft. furnishing and laying 12-in. vitrified pipe drains	2.50	3.00	4.00
200 ft. furnishing and laying 10-in. vitrified pipe drains	2.00	2.50	3.50
200 ft. furnishing and laying 8-in. vitrified pipe drains	1.75	2.00	3.00
300 ft. furnishing and laying 6-in. vitrified pipe drains	1.50	1.00	2.50
300 ft. furnishing and laying 4-in. vitrified pipe drains	1.50	.50	2.00
Furnishing and setting 6 sets 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by city	50.00	50.00	50.00
75 ft. furnishing and laying 2-in. galvanized iron pipe	1.60	1.50	2.00
8 ton furnishing surplus cast iron pipe and fittings	50.00	50.00	50.00
Extended totals	$268,623	$268,958	$290,835

Buildings (Continued)

Ark., Eudore — Church — First Baptist Church, 2 story and basement, brick and concrete, to W. H. Gard, Dermott, Ark. Private plans. Est. cost $200,000.

Ark., Hamberg — Court House — Ashley Co. 3 story, brick, stone and concrete, Public Sq., general contract to T. R. Bethea, Fordyce, Ark., $99,800.

Tex., Abilene—Dormitory—Simmons College, 3 story, rein.-con., brick and stone, on campus, to R. C. Lewis, Abilene, $125,000.

Tex., Denton — Administration — Bd. Regents, Texas State Teachers College, 3 story, rein.-con. and brick, to Bellows & McClay, Slaughter Bldg., Dallas, $232,275. Noted Aug. 16.

Tex., Groesbeck—Courthouse—Limestone Co. 3 story and basement, 104 x 168 ft., rein.-con. and brick, to W. M. Rice Constr. Co., Amarillo, $288,000. Noted Aug. 9.

Calif., Long Beach—Apartment—Canterbury & Bradford, 11 story and basement, 110 x 270 ft., rein.-con., Ocean Ave. and 3rd Pl., to Ransford-Goble Co., Highland Ave., Los Angeles, $1,000,000.

Calif., Los Angeles—Apartment—Ardmore Corp., 4 story and basement, brick, 6th St. and Wilshire Blvd., to C. Thoren, 6764 Hawthorne Ave., $155,000. Noted Aug. 23.

Calif., Los Angeles—Apartment—P. M. Rutherfield, Van Nuys Bldg., 4 story and basement, brick, West 9th St., to Meline Co., Sun Drug Bldg., $175,000.

Calif., Los Angeles—Loft—W. W. Paden, et al., Story Bldg., 6 story, rein.-con., Lebanon and 6th Sts., to Robertson & Evans, Grant Bldg., $155,000.

Calif., Santa Clara—Gymnasium—University of Santa Clara, 1 story, brick and steel, to J. H. Miller, 70 West San Fernando St., San Jose, $150,000. Noted Mar. 15.

Calif., Santa Clara—Hall—University of Santa Clara, for R. E. McKenna Hall, 3 story, rein.-con., to J. H. Miller, 70 West San Fernando St., San Jose, $200,000.

Que., Montreal — City Hall — For constructing concrete floors, roof, underpinning work, etc., for new city hall to J. A. Durocher, 91 Chambly St., $229,400. Noted Aug. 30.

B. C., Victoria—Office—Canadian Pacific Ry., Windsor St., Montreal, Que., 4 story, 50 ft. high, 50 x 120 ft. concrete, brick, tile and stone, Belleville St., to Luney Bros. Ltd., Saywood Bldg., $150,000.

Federal Government Work

PROPOSED WORK

Mich., Saulte Ste Marie—Dredging—U. S. Engineer, plans dredging 8,000 cu.yd. rock in Vidal Shoals, here.

BIDS DESIRED

N. Y., Dunkirk—Superstructure—Oct. 3, at office U. S. Engineer, Buffalo, stone superstructure on breakwater, here; adv. E. N.-R., Sept. 6. Noted July 19.

Ky., Dawson Springs — Outside Service Lines—Sept. 29 at office U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., outside service lines for heating, drainage, etc., for recreation building and 4 duplex officers quarters, here. F. T. Hines, dir.; adv. E. N.-R. Sept. 6.

Ill., Chicago—Pipe-Line Dredge—Nov. 1, at office U. S. Engineer, 537 South Dearborn St., pipe line dredge; adv. E. N.-R., Sept. 6.

Kans., Ft. Riley—Road Repair—Sept. 24, at office of W. H. Whiteside, constr. quartermaster, repairing roadway; adv. E. N.-R. Sept. 6.

Colo., Denver—Gates, Hoists, etc.—Oct. 3, at office Bureau Reclamation, furnishing gates, hoists, etc., for Boise, Idaho, and Riverton, Wyo., Projects. D. W. Davis, comr.; adv. E. N.-R. Sept. 6.

Colo., Grand Junction—Mailing Vestibule—Sept. 28 by Treas. Dept., Wash., D. C., mailing vestibule, etc., in U. S. Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Sept. 6.

BIDS RECEIVED

Mich., Ludington—Superstructure—U. S. Engineer, Milwaukee, Wis., Aug. 28, removing timber superstructure and constructing concrete superstructure, here, from S. M. Siesel Co., 160 Ogden Ave., Milwaukee, Wis., 1,700 lin.ft. timber superstructure removed, $10, 4,120 cu.yd. concrete foundation blocks, $16.50, 3,590 cu.yd. concrete superstructure $16.50, 92,500 lb. reinforcing $0.05, 34 mooring posts $25. Noted July 26.

Okla., Tulsa—Workroom—Treas. Dept., Wash., D. C., enlarging workroom at U. S. Post Office, here, from W. MacDonald Constr. Co., Odd Fellows Bldg., St. Louis, Mo., $9,700.

California—Road—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., Dept. Agriculture, 881 Mills Bldg., San Francisco, clearing and grading Big Bear Valley Rd. extension, San Bernardino Co., 50,900 cu. yd. excav., 1,100 lin.ft. 18 in. corrugated pipe, etc., from H. M. Henning, Eagle Rock, furnishing explosives $61,882, Government furnishing explosives, $56,782. Noted May 4, 1922.

CONTRACTS AWARDED

D. C., Anacostia—Hangar—Spec. 4868—Bureau Yards & Docks, Navy Dept, Wash., D. C., landplane hangar, here, to C. A. Hofferberth Constr. Co., Woodward Bldg., Wash., $6,570 (60 days). Noted Aug. 23.

Calif., San Diego—Barracks, etc.—Spec. 4843—Bureau Yards & Docks, Navy Dept., Wash., D. C., 2 barracks and extension to mess hall at Training Station, here, to R. E. McKee, 1918 Texas St., El Paso, Tex., Items 1 and 6, $206,194 (200 days). Noted Aug. 23.

Miscellaneous

PROPOSED WORK

Tractor and Road Grader—Southington, Conn. — Bd. Selectmen plans to purchase tractor and road grader. W. T. Foley, member.

Flood Control—Canisteo, N. Y.—City and State plan reconstructing Bennett and Purdy Creeks, to eliminate constant flood menace, also enlarging channel of Canisteo River. $100,000.

Park—Jamestown, N. Y.—Plans park at Casadaga waterworks. $26,000. L. Bergman, city engr.

Amusement Park—Sharon, Pa.—E. E. Clepper, engr., West State St., prepared plans for amusement park, dancing pavilion, hotel, 1 mi. dam 45 ft. high creating lake 1 mi. wide and ¼ mi. long, etc. $1,500,000. Owner's name withheld.

Elimination of Grade Crossings—Louisville, Ky.—Bd. Pub. Wks., retained Technical Advisory Corp., 15 Park Row, New York City, to make surveys of Louisville with idea of eliminating all grade crossings. $10,000.

Subway—Ashtabula, O. — City, Pennsylvania R.R., Broad St., Phila., and New York Central R.R., Grand Central Terminal, New York City, plan subway under tracks of above railways. $632,000. City's share of cost $192,000, balance to be divided between railroads. F. H. Hardin, c/o New York Central R.R., ch. engr.

Levee—Indiana—Drainage Comn., Gibson Co. (Princeton), plans levee on left bank of Wabash River in Gibson and Posey Counties, 40 mi. long, crown width 6 ft., side slope 1 on 3. $100,000. H. C. Morrison, engr.

Revetment — Illinois — Cleveland, Cincinnati, Chicago & St. Louis Ry. Co., Union Central Bldg., Cincinnati, soon takes bids 2 mi. revetment, incl. piles, riprap, current retards and concrete pavement, between Mound City and Cairo, here. $25,000. C. A. Paquette, ch. engr.

Gas Container—Sheboygan, Wis. — Wisconsin Pub. Serv. Corp., plans gas container and holder of 1,000,000 or more cu.ft. capacity. A. F. Davey, mgr. Engineer not selected.

Flood Control—Ft. Worth, Tex.—State having topographic surveys made of all important river valleys for flood control. $600,000. J. A. Norris, Texas Bd. of Water Engrs., Austin, engr.

Transmission Line, etc.—Paden, Okla.—Voted $25,000 bonds electric transmission line, electric distribution system and pumping equipment. Gantt & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Park—Fresno, Calif.—City plans to purchase between 60 and 90 acres along San Joaquin River and improve for park site. R. Y. St. George, city clk.

Gas and Electric Systems, etc.—Oroville, Calif.—Pacific Gas and Electric Co., 445 Sutter St., San Francisco, plans to expend $60,000 to improve gas, water and electric systems.

Subways—Montreal, Que.—See "Streets and Roads."

BIDS DESIRED

Fire Alarm System—New York—Sept. 11, by T. J. Drennan, fire comr., Municipal Bldg., New York City, extension to fire alarm system, Boro of Queens.

Conduits—Erie, Pa.—Sept. 14, 4 units low tension conduit system. $50,000. F. G. Lynch, city engr.

Culvert—Wilkinsburg, Pa.—Sept. 10, by W. N. Baker, boro. secy., 608 Ross Ave., concrete culvert from Kelley to Rebecca Aves. also paving bottom of present culvert from Rebecca to South Aves., 500 cu.yd. concrete, 870 sq.yd. brick paving, etc. $25,000. C. F. Sperling, boro. engr.

Pipe—Nashville, Tenn.—Producers Refining Co., Box 147, in market for 44 mi. 3 in. pipe.

Dragline—St. Francisville, La.—The Contractor, Box 205, is in market for caterpillar dragline, ¾ yard.

Electric Light System—Washington, La.—Sept. 17, by A. J. Miller, mayor and Bd. Aldermen, constructing electric light system, incl. service pump for water supply, etc.

Materials—St. Paul, Minn.—Sept. 11, by H. W. Austin, city purch. agt., (1) structural and reinforcing steel for repairing Wabasha St. bridge over Mississippi River (2) materials for reflooring same, incl. 209,521 ft. No. 1 fir, 15,000 pieces repressed paving blocks, 1,320 sq.yd. 3½ in. creosoted wood blocks, 21,000 lb. asphalt filler, 40,000 lb. pitch filler (3) eight hundred and eighty 12 ft. lengths 6 in. Class B c.i. pipe and three hundred and thirty 12 ft. lengths 16 in Class B c.i. pipe for Water Dept.; (4) fifty 2 in. brass gate valves, fifty 1½ in. brass valves, fifty 2 in. corporation cocks, fifty 1½ in. corporation cocks; (5) paving materials for various streets, 3,000 bbl. portland cement, 2,200 cu.yd. crushed rock, sewer brick, reinforcing, etc. G. M. Shepard, city engr.

Gas System—Fairfax, Okla.—Sept. 17, by J. N. Fly, city clk., gas system, incl. regulator station, high and low pressure lines, 35,000 ft. 2-6 in. c.i. pipe, etc. $36,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Copper and Steel Standards, etc.—Santa Ana, Calif.—Sept. 10, installing 86 double light copper and steel standards for ornamental lighting system in portions of West 4th, East 5th and North Main Sts., also 2 rein.-con. transformer vaults, conduits, etc.

Transmission Line—Nova Scotia—Sept. 10, by A. T Craft, secy. Nova Scotia Power Comn., Halifax, 66,000 volt single circuit transmission line from Hopewell to Stellarton and 13,200 volt line from Stellarton to Pictou, Pictou Co.

BIDS RECEIVED

Underground Conduits — Montreal, Que.—Underground conduits in district bounded by St. Lawrence, Craig, Bleury and Lagauchetiere Sts., from Atlas Constr. Co. Ltd., Belmont St., $78,125. Noted Aug. 2.

CONTRACTS AWARDED

Foundation Wall, etc.—New York, N. Y.—Bd. Educ., 500 Park Ave., foundation wall, piers, trap pits, etc., at George Washington High School, Audubon Ave. about 432 ft. north of West 190th St., here, to J. T. Brady Co., 103 Park Ave., $113,598. Noted Aug. 23.

Heating and Ventilating—Apparatus, etc.—New York, N. Y.—Bd. Educ., 500 Park Ave., heating, ventilating and temperature regulating apparatus in Julia Richman High School, 2nd Ave. from East 67th to East 69th Sts., to Gillis & Geoghegan, Inc., 537 Bway., $268,630. Noted Aug. 23.

Underpass—Alabama—State Hy. Dept., Montgomery, underpass under Southern Ry. and paving highway, Federal Aid Project 108 Colbert Co.; Proposal 1 (road work) to Southern Rds. Co., Amer. Trust Bldg., Birmingham, $12,253; Proposal 2 (bridge work) to Gibson Constr. Co., Arnstein Bldg., Knoxville, Tenn., $11,022. Noted Aug. 9.

Car Barns—Ironwood, Mich.—Lake Superior Dist. Power Co., subsidiary of Ironwood & Bessemer Ry. & Light Co., Ironwood, 1 story, 56 x 126 ft., concrete, brick and steel car barns, to Tomlinson & Egan, Ashland, Wis. Engrs. est. $50,000.

Gas Container—Milwaukee, Wis.—Milwaukee Gas Light Co., 182 Wisconsin St., structural steel supports, steel tank 145 ft. high, 25th St. and St. Paul Ave. to Riter-Conley Co., Oliver Bldg., Pittsburgh, Pa. Engrs. est. $1,500,000. Noted Aug. 23.

Mud Shell—Houston, Tex.—Harris Co., 10,000 tons mud shell for road construction, to W. H. Haden, Ave. A, Galveston, at $1.45 per ton.

Fire Alarm System—Sacramento, Calif.—City Commissioners received no bids installing fire alarm system. Work will be done by force account. $25,000 bonds voted for project. A. Givan, city engr. Noted Aug. 23.